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The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated

Vol. XXVI.

HATBORO, PENNA., JANUARY 1918

No. 1



There are no strained landscape effects here. It is merely good gardening, putting plants where they will thrive and look at home.

The Use of Hardy Perennials on a Lawn

The use of hardy perennials on a lawn as shown in the picture is ideal. Compare it mentally with any arrangement you may have seen where they are planted in borders or beds where there are geometrical lines and you will quickly come to the conclusion the semi-natural arrangement is the best.

How many suburban and country places there are with natural contours of ground, woodland and lawn, that while very nice in their way show more of the strained effort of the landscape gardener than beauty.

The arrangement as shown in the picture can hardly be called natural, because whoever saw such a combination of plants growing wild? It is safe to say if neglected, it would soon be a mass of weedy growth.

It is simply good gardening, putting plants where they will thrive and look well.

It will be noticed there are no stiff or exotic looking kinds such as the paeonies and hollyhocks or even those obviously foreign, such as the Japanese and German Iris, chrysanthemums, etc.

These plants are more appropriate in the borders and beds.

While such finely drawn lines in the use of hardy perennials may be ridiculed it is the small things that go to make a harmonious whole and it is only the master, with a thorough knowledge of his plants, that can produce real pictures.

It is generally believed that Iris have water associations which is quite true of the Iris Kempferi varieties, *I. pseudo acorus*, *I. siberica* and others of the narrow-leaved kinds but it is almost pathetic to see the Germania types used as bog plants when they are really upland plants.

In a garden, of course, plants may be used in any way desired without outraging their natural associations, but where they become part of the landscape they ought to be fitting and look at home.

The picture shows a position where the fertility and moisture is evidently good, too often near large trees this is not always the case.

EVERGREEN CUTTINGS

January and February are good months in which to propagate many kinds of evergreens. In northern localities the nurseryman cannot do much out of doors and if there is a cool greenhouse which can be kept about forty degrees the time can be profitably used in putting in evergreen cuttings. Arbor Vitae, Biotas, Retinisporas, Yews, Junipers and such types propagate readily from cuttings. Spruces, Firs, Pines and Cedars, of course, have to be propagated from seed and in the case of special forms or varieties by grafting.

It is better to put the cuttings in flats rather than in a cutting bench, as sometimes it takes them quite a long while to root and the advancing season may necessitate moving them to a different position before they are ready to pot up or transplant. It is best to have the flats made of a convenient one-man size and about three inches deep and properly drained. The sand should be clean and sharp so as to avoid water logging and consequent fungus.

In selecting the wood for cuttings it is best to cut it in mild weather and store in a cool, moist place until needed.

The size to make the cuttings depends upon the kind of wood available and the variety. Some of the commoner kinds of Arbor Vitae root very readily and rather large sized cuttings, say from four to six inches long may be used. For the slower rooting ones three inches or smaller will be about right.

Among the Arbor Vitae *Thuya occidentalis* George Peabody does not root so easily as the green kinds.

Among the Retinisporas, the obtusa varieties are more

difficult to root than the plumosa and pisifera.

The Junipers, however, take the most careful watching. If the temperature gets too high they start to grow without making roots and then they are hopeless. They should be kept cool and moist, syringing and shading them during bright weather. If a little bottom heat can be given while the atmosphere of the house is kept cool, better and quicker results will be obtained.

The subsequent handling after they are rooted will depend on facilities. The best and surest results will be had by potting into small pots or bedding them in frames where they can receive special attention.

If the season and ground is favorable a few of the quick-growing sorts can be put right out in the field, but it is much safer to keep them where they can be looked after during the summer. Should circumstances not permit of attention at the proper time, they may be left in the cutting boxes all the summer, in fact this is advisable in some instances, as when they are not well rooted. By the following spring they will be well hardened and better able to take care of themselves.

Iowa State College is making a special study of top working standard varieties of apples on hardy stocks, with the idea of getting the comparative values of the different stocks used for special varieties.

The State College would be very grateful if anyone has information, or will refer them to publications of interest along this line.

STANDARDIZATION OF COMMERCIAL NURSERY PRODUCTS

*By Wm. T. Kirkman, Jr., President of Kirkman Nurseries,
Fresno, Cal., Before the San Jose Convention,
California Association of Nurserymen.*

Last year I asked you to consider with me the great mutual benefits to be derived from a general adoption of the caliper grading method, which results in the customer obtaining trees of uniform size in ordering a given grade, instead of receiving trees varying in caliper from the size of a broom handle to that of a lead pencil, even though all of said assortment might actually fall within the height measurement of "four to six feet," which is the usual designation for standard first grade deciduous trees.

At this time I am glad to report, that there is quite a general tendency amongst our members to deliver stock with considerable regard for caliper specifications, thus eliminating the unjust competition of slender second grade stock, as against correctly graded trees of our contemporaries.

As all of us adopt this method of grading, the outsider, or the Californian, who attempts to mislead prospective planters with a lower quotation, with the idea of delivering trees not up to caliper, will soon find himself very unpopular, not only with the nurserymen who are endeavoring to uphold the grades, but with the planting public as well.

The proposition I want to ask you to think over for later definite action is the Standardization of Varieties, and by this I mean the selection and improvement of varieties wherever possible, and the elimination of inferior strains, and the general adoption by the California Nurserymen's Association of well defined varieties.

It seems to me that a good way to begin a movement of this kind, that will eventually command the co-operation of every propagator in the state, would be to collectively organize and own a sort of bureau for the careful and diligent study of varieties and distribution of propagation wood.

This bureau for the betterment of California Horticulture would appoint an advisory commission of a few of our members who are best fitted by experience to act as a consultation board, and they employ an active, competent man to personally make a careful study of standard and new varieties, and determine from what portion of the state and from which orchards, and from which individual trees in said orchards, can be procured bud wood of the record breakers of each respective variety being called for by the planters of the state.

There are many of us who are doing what we can toward the improvement of our production by the selection of parent trees, but gentlemen, our efforts are at present seriously lacking in unity. For instance, there are at least a dozen new midsummer Cling peaches being propagated and heralded as the very best varieties to ripen between the Tuscan and Phillips. We are all perfectly honest in believing that the varieties we have discovered, and are propagating, are the best, and we individually spend considerable time and money working

on these matters, and considerable money in advertising according to each individual view point.

To refer again to the midsummer Cling instance, some of us recommend the Simms, others the new Peaks, and Van Emmons, of the Selma district, others the Haus Cling of Yuba County, and then some one looks closely into all these favorites and advances the possibly correct ultimatum that all four of these varieties are identical!

Measure in dollars and cents the value of your time and mine in individually working out such matters, and the cost of printing for the public to read effusive descriptions of each of these varieties will total a sum sufficient to relieve all of us of trying to do what some one head scientific horticulturist could do, easily, correctly, and with much greater satisfaction to the buying public.

A few years of intelligent and consistent work by a man qualified to undertake this scientific work of determining varieties, improving strains, eliminating superfluous names, and delivering to the progressive nurserymen of this state the results of these investigations, should put the California Association of Nurserymen in a class by itself.

Our reputation for delivering nursery stock of the highest possible types, and of correct nomenclature would mean to the horticulturists the country over, what Holland endeavors to mean to the bulb buying world, and what Kentucky strives to deliver in mules.

The value of such a movement would be unquestioned. The investment would not be greater than it now is, considering the difficulty of the work as we now separately attempt to do it. Efficiency experts are employed in many lines not to be compared with the importance of this.

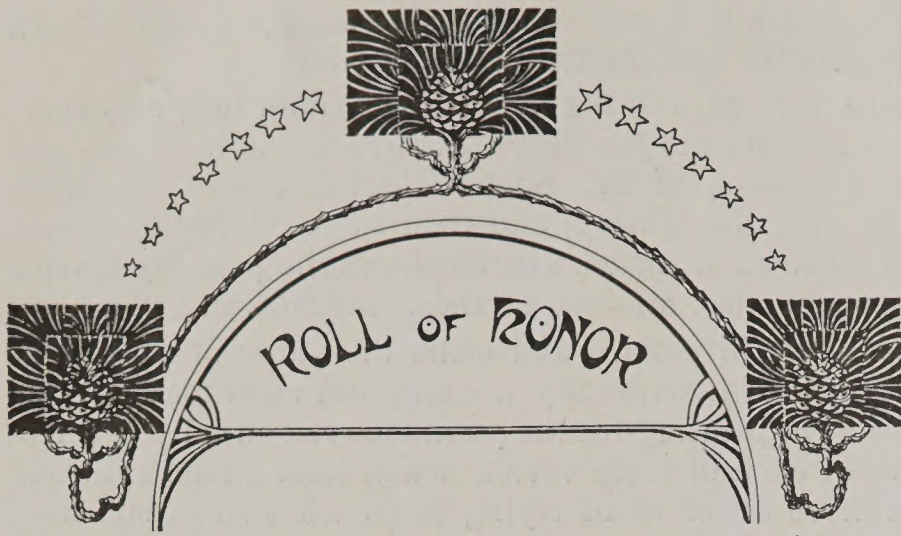
The honest advertising value of this sort of standardization would put California Nurserymen—in this peerless empire of horticulture—where they belong, unquestionably the best—the "Timken bearing" of the orchard industry of the country. Think it over.

SUPPLY OF BOXWOOD IN JAPAN

The nearest equivalent in Japan to Turkish boxwood appears to be "tsuge" (*Buxus sempervirens*, Linn.), which has been used by the Japanese for many years in cutting wood blocks for printing and engraving. It is of a yellowish color, fairly hard, easily worked, has a fine close grain, and is unusually free from the fault of splitting and cracking. It is now used in the manufacture of official seals, abacus counters, combs, etc. The chief drawback, however, would be the difficulty of obtaining blocks which measure more than 6 or 8 inches in diameter, as the large timber of this variety is nearly all exhausted. At best the trunk seldom exceeds a foot in diameter.

Cherry wood also is used to a considerable extent by the Japanese and is obtainable in larger blocks than tsuge. The grain, however, is said to be too coarse for fine work.

Aogiri, or Sultan's parasol (*Sterculia platanifolia*), and honoki (*Magnolia hypoleuca*) are also used, but are rather soft and easily marred.—*Commerce Reports*.



IT is the purpose of the National Nurseryman to publish a roll of honor consisting of the names of those nurserymen serving in the United States army in the present war. We shall appreciate it if our readers will send us their names and photographs if possible.

- Carroll A. Bagby, Capt. U. S. Infantry—New Haven Nurseries, New Haven, Mo.*
- Harold J. Bagby, Enlisted Medical Reserve Corps—New Haven Nurseries, New Haven, Mo.*
- Lew W. Bagby, Lieutenant (Junior Grade) U. S. Navy—New Haven Nurseries, New Haven, Mo.*
- Toronto, Canada.*
- Oliver W. Bagby, Lieutenant, U. S. Navy—New Haven Nurseries, New Haven, Mo.*
- Ralph B. Bagby, Lieutenant, 21st U. S. F. A., Fort Riley, Kansas—New Haven Nurseries, New Haven, Mo.*
- Robert E. Bagby, Cadet, Senior Class, United States Military Academy—New Haven Nurseries, New Haven, Mo.*
- John H. Challin, Aviation Section of the Signal Reserve Corps, San Antonio, Texas. Secretary and Treasurer of the Winchester Nursery Company, Winchester, Tenn.*
- William Flemer, Jr., Private U. S. Expeditionary Force, Ambulance Corps, Battalion No. 23, Section No. 23, France. F. & F. Nurseries, Springfield, N. J.*
- Edwin Hoyt, 1st Lieutenant of the Field Artillery, Officers Reserve Corps, now stationed at Camp Grant, Rockford, Ills.—The Stephen Hoyt's Sons Co., Inc., New Canaan, Conn.*
- Henry Edward Kelley, 1st Lieutenant, Company C, 165 Infantry, American Expeditionary Force, now in France.—The Stephen Hoyt's Sons Co., Inc., New Canaan, Conn.*
- Albert F. Meehan, Third Officers' Training Camp, Yaphank, L. I., N. Y. Member of firm Thomas B. Meehan Co., Dresher, Pa.*
- Wade Muldoon, Sergeant, Headquarters Military Police, Camp Hancock, Ga.—Thomas Meehan & Sons.*
- Stuart Perkins, Wireless Operator, Special Radio School, Cambridge, Mass.—Jackson & Perkins Co., Newark, N. Y.*
- Paul Rathert, Battery F., 128th U. S. F. A., Ft. Sill, Oklahoma, New Haven Nurseries, New Haven, Mo.*
- Meredith P. Reed, Captain, Sixth Company Section U. S. Officers' Reserve Corps.—Vincennes Nurseries, Vincennes, Indiana.*
- Philip Rouse and Julian Rouse, nephews of the Smith Brothers, now in the Naval Reserve, with headquarters at Jacksonville, Fla.*
- Charles Schwentker, Battery F, 128th U. S. F. A., Ft. Sill, Oklahoma—New Haven Nurseries, New Haven, Mo.*

Charles R. Smith, Aviation Section of the Signal Reserve Corps, Aviation Camp, San Antonio, Texas.—Smith Bros. Nursery Company, Concord, Ga.

Lawton V. Smith, nephew of the Smith Brothers, of Concord Nurseries, of Concord, Ga., now a lieutenant in the Aviation Section of the Army, and stationed near Clay M. Stark, Stark Bros. Nurseries & Orchards Co., Louisiana, Missouri. American Field Service. Now in France.

Lloyd C. Stark, Major of the Field Artillery, Fort Sill, Okla. Vice-President and a Director of Stark Bros. Nurseries and Orchards Co., Louisiana, Mo. President of the National Association of Nurseries.

George Taylor, Battery "F," 108th U. S. F. A., Camp Hancock, Georgia.—Thomas Meehan & Sons.

Stanley V. Wilcox, Co. E. 103rd Engineers, Camp Hancock, Augusta, Ga. Thomas Meehan & Sons, Germantown, Pa.

DESTRUCTIVE FIRE AT WILLADEAN NURSERIES

Fire destroyed two storage warehouses and the fumigating house of the Willadean Nurseries, The Donaldson Co., at Sparta, Kentucky, on Sunday night, December 16th, with about \$10,000 worth of stock, tools, nursery equipment, etc.

The fire was discovered shortly after 11 p. m. When discovered the flames were bursting through the roof of the storage warehouse and the fire was so well under way that the small force which could be assembled could make no headway in checking the flames.

Mr. Donaldson and a few assistants succeeded in keeping the gas tank house connected with the plant from exploding, for if the fire had reached that the explosion would not alone have wrecked the tank house but the other building, as well. The office building, also, was saved.

The plant was swept clean, not even a spade of the big equipment carried was saved.

The nursery stock destroyed was all wrapped and bundled in the storage warehouse and had been dug and prepared for shipment to fill orders. All of this stock had been sold and in the lot was about \$2,500 worth which had been taken out a few days previous for shipment, but on account of the railroad being unable to handle it that day, had been taken back to the storage house to avoid freezing.

The warehouse was of concrete, and it is thought that the walls can probably be saved and utilized for a new roofing and the other essential equipment on the interior. The roof was of asbestos, but the flames, which had fed rapidly on the vast quantities of burlap and other material, burst through the roof as though it had been of paper.

The fire was doubtless caused by the explosion of one of the coal oil heaters with which the storage warehouse was heated. Every night this winter previous to Sunday night, Mr. Donaldson had inspected conditions in the warehouse before retiring, but on this particular night had neglected to do so. His loss is about \$10,000, as closely as he can estimate it, and unfortunately there was no insurance on any of the destroyed stock or buildings. Mr. Donaldson will resume business as soon as weather

conditions will permit and as soon as he can prepare at least temporary quarters for the storing of his nursery stock as it is dug. He has a big stock in the field and can probably duplicate most of the orders that were destroyed in the fire.

Mr. Donaldson will have the sympathy of the trade in his misfortune and no doubt every consideration from those whose orders have been held up on account of the fire.

INCREASED PRODUCTION OF FRUIT AS FOOD TO HELP WIN THE WAR

Representative nurserymen of the North Central and Mississippi Valley states in session in Des Moines, Iowa, December 4th, 5th, 1917, desire to greet the Honorable Herbert Hoover and all other food administrators for these reasons:

Whereas:

the successful prosecution of the war in which our country is engaged will overtax our normal food production if we are to supply our people at home and our allies abroad, and

Whereas

throughout every state and section of the nation there are scores of millions of fruit trees of mature and bearing size and age that would bring within the reach and purchasing power of the most humble of our citizens, hundreds of millions of bushels of fruit in excess of the normal production during the season of 1918 without the entailment of great expense or the encumbering of our already crowded transportation facilities. Therefore, be it resolved that we nurserymen in conference assembled tender our services gratuitously to the owners of fruit trees everywhere in the matter of instruction for the immediate rejuvenation of barren and Under productive trees to make them fully productive. We request nurserymen everywhere to render this patriotic service whenever and wherever possible to increase the production of fruit as food from present orchards for the winning of America's war.

We respectfully suggest that the national and state food administrators include in all their propaganda for increased food production this agitation and admonition to spray, prune, cultivate, fertilize and otherwise so handle as to bring into full and immediate production all orchards and fruit trees of whatever kind or wherever located.

We respectfully suggest that this resolution be given wide and general dissemination by all food administrators, publications and other interests working for the winning of the war.

(Signed) COMMITTEE OF RESOLUTIONS.

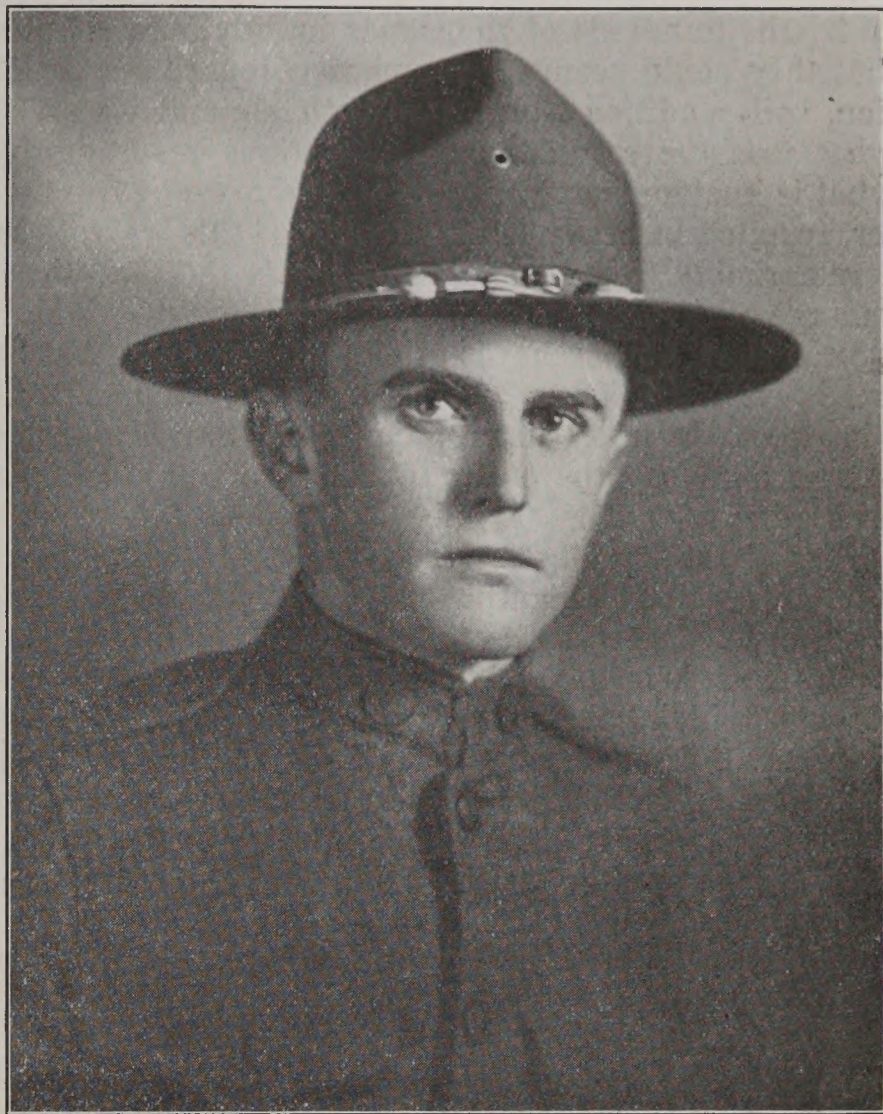
E. S. Smith, Troy, Ohio.

F. J. Wright, Des Moines, Ia.

Prof. S. A. Beach, Ames, Ia.

H. L. Merkel, Des Moines, Ia.

Private Howard E. Andrews, in the Landscape Department of the A. W. Smith Company, Pittsburgh, Penna., enlisted in the U. S. Signal Corps, and sailed for France several weeks ago. Mr. Andrews began his career as a nurseryman at Harrisons' Nurseries, Berlin, Maryland;



Howard E. Andrews

and at various times has been in the employ of such well-known nursery firms as the Berry Hill Nursery Company, Harrisburg, Penna., and the Andorra Nurseries, Chestnut Hill, Penna. He is twenty-five years old, unmarried, and glad to go in defense of his country.

THE SATSUMA ORANGE

The Satsuma Orange is scarcely known and has never been produced in sufficient quantity to become well established in the markets, but it has become established in the desires of all who have sampled them and the demand far exceeds the supply. The Satsuma differs from other oranges in methods of production and time of harvest that it is an industry of its own and has to be handled along a line peculiar to itself.

It is a fact that the farther north they can be grown and escape the frost the better quality of fruit they produce. And below the frost line they are a failure; they are also a failure on the rich alluvial soil even though the temperature is satisfactory, or in other words our cut over pine lands within 100 miles of the coast, which are short of humus and nitrogen is the ideal location for the production of this orange. There is no doubt some of you would like to ask if the Satsuma industry was not ruined in South Alabama by the severe weather the past winter. I will anticipate this desire on your part and will say that

the reverses of last winter were very serious and the losses fell very heavy on some, but otherwise it was a blessing in disguise for the following reasons, first, when the earlier plantings began to produce crops which brought from \$500 to \$1,000 per acre it was like the discovery of gold in California or Alaska. Trees were planted by the hundreds of thousands in any and all places that they could secure a foundation regardless of location, soil conditions, drainage, both air and water, etc., what was the results, usual conditions resulting from what is known as our July storm and a very severe winter, resulted in heavy loss. In spite of this we will have a remarkably fine crop in all orchards that had the advantage of favorable location. If you should visit Mobile we can show you orchards of eight to ten years that have trees carrying 1,500 to 2,000 oranges. At the present time I heard one man say his crop this year, from five-year-old trees would pay the entire expense of producing the orchard.

How about that blessing in disguise? It is like this, we will go forward by planting every available tree, and they will not be planted on low swamp lands or in low swails where there is no air and water drainage, but on our high plateaus which have both air and water drainage and the results will be success with a big S. The harvest time of the Satsuma is November and December and at a time when there is very little competition and this assures a good market and the quality of the orange is the best advertisement of all.

Georgia will in the future be a great booster for the Satsumas grown within her borders. The Eastern coast from Charleston, S. C., to the Florida line is adapted to the production of the Satsuma as also is the South tier of counties in this state. The future of the Satsuma Orange and Paper Shell Pecan is in the hands of the people and it is up to them to make it a success or failure. Success and failure are brothers and they travel side by side and you may see their names written on the fences as you pass by. Let us as nurserymen do what we can to exterminate failure that success may reign supreme. In conclusion I will repeat that it will require all the enthusiasm and best efforts of the optimists to produce enough of either the Paper Shell Pecan or the Satsuma Orange to supply the unborn generations.

R. L. SCOTT, Sec'y.

Citronelle Nursery & Orchard Co.,

Citronelle, Ala.

Read before the meeting of the Southern Nurserymen's Association, Atlanta, Ga., Aug. 29-30, 1917.

A MERRY CHRISTMAS FROM STARK BROS. NURSERIES AND ORCHARDS CO.

The Editorial Office of the "National Nurseryman" was made happy on Christmas morning by a box of perfect "Delicious" apples from the Stark Bros. Nurseries and Orchards Co., Louisiana, Mo.

A princely gift, no apple could be more handsome or more delicious.

CONCRETE SUGGESTIONS FOR A NATIONAL BUSINESS BUILDING CAMPAIGN FOR NURSERYMEN.

By Joseph J. Lane, of the Garden Magazine and Country Life.

Some day soon the nurserymen are going to wake up and discover that they have been missing some of the biggest opportunities ever offered an industry.

At Detroit, a year ago, and again at Philadelphia last June, at their convention, they listened to considerable talk about advertising—in fact the subject was talked to death.

One supposed advertising man even went on record as urging them *not* to advertise—but to hire a press agent as he called "it," or as we know the individual referred to "a space grafter." This same suggestion came before a meeting of the Ornamental Growers' Association several years ago,—and fortunately for them, the business men present ignored the suggestions of one of these "Press Agents."

The profession of advertising and merchandising is worth paying for when you want advice that's worth paying for. The only thing you get for nothing, is something that is worth nothing to somebody else.

National Nursery advertising is possible—even as the same has been possible for the lumber associations, cement associations, California Fruit Growers,—various Cattle associations, and others,—too long a list to repeat here.—The successes achieved by these organizations are fitting proof of the possibilities of co-operation in merchandising effort in other lines of business.

Let's stop referring to it as "National Nursery Publicity" that isn't what you fellows want.—You want national co-operative merchandising,—whether it comes to mean advertising ideas properly used, co-operative catalogue building, trade-extension reports, or a million and one other things that will come along after you once get started.

"After you once get started."—That's the rub. You'll never get anywhere by talking. It's by *doing* things that they become realities. You all know or ought to know, that the idea of co-operative sales effort is a good thing for you. The next step is to pay somebody to study your sales possibilities, so that some tangible plan may be presented you as a basis for a *start*.

Retain the services of a real business man with merchandising experience on a big scale, preferably a man who doesn't know the nursery business—(and by that suggestion, I imply that a man would be handicapped by too much knowledge of the way the business has been conducted in the past). Retain a man of vision, ideals, and initiative. Pay enough to get a *real* man.

Initiate a fund with all the nurserymen's associations starting it with actual contributions payable into a common treasury on a certain date. Invite investments in this fund by all nurserymen.

Then let your Mr. Merchandising Man make his survey of the industry,—let there be appointed a group of men like Mayhew, of Texas, Watson of New York, Pierson of Connecticut, Atkins of New Jersey, to advise with him. Atkins is the man who touched off the fuse of the public-

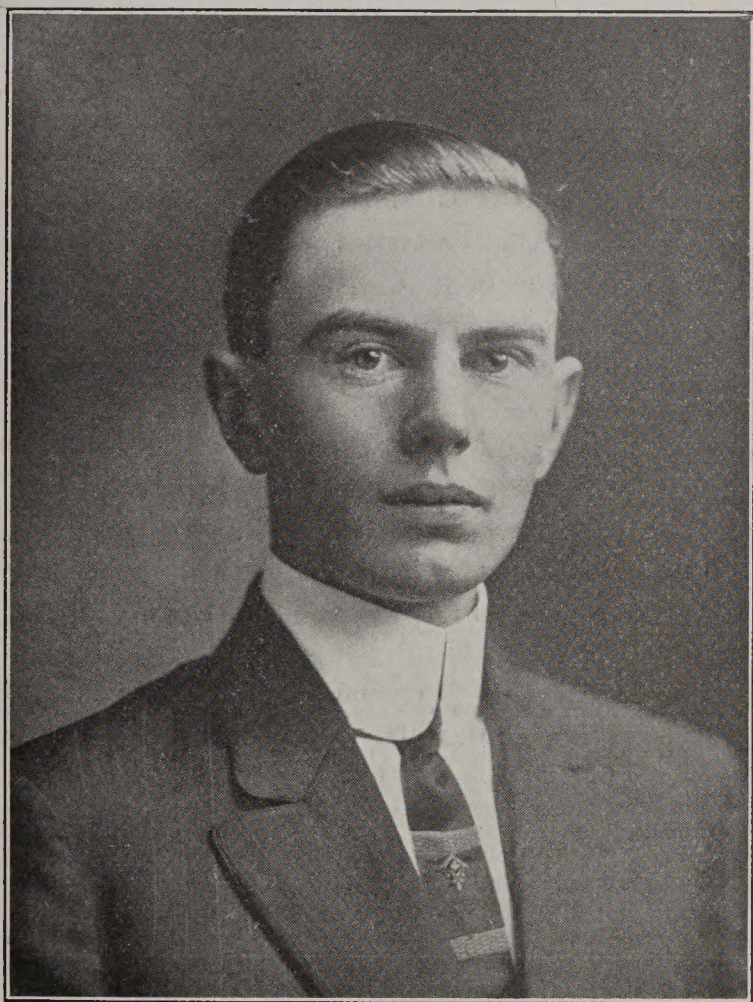
ity idea at the recent florists' convention, and got them started, ahead of your nurseryman.

When you get a man to run your campaign who searches for facts, and then bases his actions on these facts, you will have a man whom you can entrust with responsibility—who can make good without the impediment of everyone trying to run his job for him—and you'll get results.

What are you going to do about it?

To the roll of men in the service of the United States must be added the name of M. J. Donohue, chief of the copymen for the McFarland Publicity Service, Harrisburg, Penna. Mr. Donohue is enrolled as a reserve officer in the Signal Reserve Corps of the Aviation Section, with headquarters at Fort San Houston, San Antonio, Texas. Up to the present time six men from the McFarland organization have volunteered for service with the colors.

Every person connected with The McFarland Publicity



M. J. Donohue

and the Mount Pleasant Press was enrolled as a member in the Red Cross during the recent membership campaign. A Red Cross auxiliary unit has been formed by the young ladies of the various departments, and a room in the Mount Pleasant Press building has been equipped with sewing machines, cutting tables and other furnishings for Red Cross work. A large quantity of supplies have been transferred to the Harrisburg Chapter for distribution as required.

Three sons of Charles J. Maloy, Mount Hope Nurseries, Rochester, New York, are in the war game. His son Charles enlisted in June and is in the base hospital waiting to be called. Thomas is in the engineers' corps in Washington, D. C. and William is at Camp Dix, Wrightstown, N. J.

WATER LILIES

A POND with water lilies growing in it is always a pleasing feature on the grounds, whether they be those of a private residence or a commercial establishment. Even if the nurseryman has not the facilities for growing them, it is always worth while to know something about them.

The culture of water lilies and other aquatics is very simple and very often an unsightly depression can be converted into a beauty spot at little cost and labor.

The best soil for growing all aquatics is the rotted vegetable matter from ponds or swamps mixed with one-third well rotted manure, and the best substitute for same is good heavy loam enriched with one-third well-decayed cow manure. All Nymphaeas and other flowering aquatics should be planted so that they will be exposed to full sunlight.

In constructing artificial ponds where the soil is not sufficiently retentive to hold water a good method is to smooth and pound firmly the bottom and sides of the excavation, then cover the whole with a layer of six inches of puddled clay, pounding it well with wooden mauls so as to bring it into one solid mass. Cover the sides with rough stones or put on a thin layer of concrete. This will prevent the sides from washing. A total depth of two feet is sufficient, one foot for soil and one for water, with an overthrow so constructed that the pond can be entirely drained or the water held at any level desired.

Depth and supply of water. This may vary from a few inches to four feet, but all of the hardy Nymphaeas and Nelumbiums will give better results if covered by 12 inches of water during the summer months. As all water lilies, and more especially the tender varieties, prefer still, warm water, do not allow the continuous flow of the fountain in the smaller pool or other continuous inflow of water in connection with the larger pond. When such are fed with a large inflow of cold water, lilies will not be a success. For artificial ponds and tanks it is best only to give enough fresh water to replace what is lost by evaporation, etc., and the best method of doing so is to give the ponds a good syringing from a hose late in the afternoon or early in the evening. The syringing besides giving the necessary amount of fresh water, will be very beneficial to the plants, as it will keep in check green and black fly and keep the leaves free from dust.

The best results will be obtained when planted in the natural mud bed, but if the water is too deep, construct boxes four feet or more square and eighteen inches deep, and place these in the pond below the surface of the water. In artificial ponds cement basins cover the entire bottom with ten inches of soil, top-dressed with two inches of sand or gravel. If this cannot be done use boxes or half-barrels filled with aquatic soil. In planting Nymphaeas, all that is necessary is to push the rhizomes into the soft mud, so that they will be merely covered, and it is a good precaution to place a stone on them until rooted, to keep them in place. When planting they should be covered only with from two to three inches of water until they have made their first floating leaf; then gradually increase the water as the plants grow.

WINTER AND FUTURE TREATMENT. Hardy Nymphaeas and Nelumbiums need no care during the winter, pro-

vided the water is of sufficient depth so that it will not freeze to the crown of the plants. In cement tanks drain off all the water and fill in with leaves or cover with boards and leaves or litter. The second spring after planting it will be advisable to transplant all such plants as have made a strong growth. This should be done by washing away most of the soil from the roots, removing all side growths and replanting the strong roots into fresh soil as before. The side growths, if planted two or three together, will also make flowering plants the same season. Lilies which are grown in beds of soil or in natural ponds will be much benefited by an application in spring of dried blood manure, broadcasted on the surface of the water at the rate of one pound to every ten square feet of surface.

NELUBIUMS. The treatment is the same as recommended for hardy Nymphaeas, excepting that they do best when planted in mud or soil that is at least two feet deep and covered only with six inches of water. When planted with other aquatics there should be partitions of brick or boards, so as to confine the tubers, otherwise they will soon take possession of the entire pond. In planting place the tubers horizontally in the mud, so that the point will be merely covered. They are gross feeders, and should have dried blood manure applied each spring, as suggested above.



John H. Chattin, Sec'y and Treas. of the Winchester Nursery Co., Winchester, Tenn. Aviation Section, Signal Reserve Corps, San Antonio, Texas.

AMERICAN ASSOCIATION OF NURSERYMEN

President—Lloyd C. Stark, Louisiana, Mo.
Vice-President—J. R. Mayhew, Waxahachie, Texas.
Treasurer—Peter Youngers, Geneva, Neb.
Attorney and Secretary for the Association—Curtis Nye Smith, Boston, Mass.
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Arbitration—W. C. Reed, Vincennes, Ind.
Exhibits—Albert F. Meehan, Dresher, Pa.
Program—J. R. Mayhew, Waxahachie, Texas.
Report of Proceedings—Curtis Nye Smith, Boston, Mass.
Nomenclature—J. Horace McFarland, Harrisburg, Pa.
Tariff—Irving Rouse, Rochester, N. Y.
Press—Ralph T. Olcott, Rochester, N. Y.
Telegraphic Code—R. C. Chase, Chase, Ala.
Hail Insurance—Frank A. Weber, Nursery, Mo.
Publicity—F. L. Atkins, Rutherford, N. J.
Distribution—M. R. Cashman, Owatonna, Minn.
Legislation—William Pitkin, Rochester, N. Y.
Transportation—Charles M. Sizemore, Louisiana, Mo.
Landscape—W. H. Wyman, North Abington, Mass.

WOMEN OF THE AMERICAN ASSOCIATION OF NURSERYMEN

President—Mrs. E. S. Welch, Shenandoah, Iowa.
Vice-President—Mrs. W. C. Reed, Vincennes, Ind.
Secretary—Mrs. E. R. Taylor, Topeka, Kansas.
Treasurer—Mrs. E. E. May, Shenandoah, Iowa.

STATE AND DISTRICT ASSOCIATIONS

American Nurserymen's Protective Association—President, Irving Rouse, Rochester, N. Y.; secretary, Thomas B. Meehan, Dresher, Pa. Meets annually in June.
American Retail Nurserymen's Protective Association—President, H. W. Marshall, Arlington, Nebraska; secretary, Guy A. Bryant, Princeton, Ill. Meets annually in June.
Association Oklahoma Nurserymen—President, P. W. Vaught, Holdenville, Okla.; secretary, Jim Parker, Tecumseh, Okla. Next meeting during week of State Fair at Oklahoma City, last of September or first of October.
California Association of Nurserymen—President, John S. Armstrong, Ontario. Secretary, H. W. Kruckeberg, Los Angeles, Cal.
Canadian Association of Nurserymen—President, E. D. Smith, Winona; secretary, C. C. R. Morden, Niagara Falls, Ont.
Connecticut Nurseryman's Association—President, Walter E. Campbell, New Haven, Conn.; secretary, F. L. Thomas, Manchester, Conn.
Idaho Nurserymen's Association—President, Anton Diedricksen, Payette, Idaho; secretary, J. F. Litooy, Boise, Idaho. No definite time has been set for next meeting. Probably in July at Boise, Idaho.
Massachusetts Nurserymen's Association—President, E. W. Breed, Clinton, Mass.; secretary, Winthrop H. Thurlow, West Newbury, Mass.
Mississippi Nurserymen's Association—President, Theodore Bechtel, Ocean Springs, Mississippi; Vice-President, S. W. Crowell, Roseacres, Mississippi; Sec'y-Treas., R. W. Harned, Agr. College.
National Association of Retail Nurserymen—President, E. S. Osborne, Rochester, N. Y.; secretary, F. E. Grover, Rochester, N. Y.
New England Nurserymen's Association—President, Harlan P. Kelsey, Salem, Mass.; Secretary, Charles Adams, Springfield, Mass. Annual meeting held on the last Tuesday in February.
New Jersey Association of Nurserymen—President, Carl H. Flemer, Springfield, N. J. Secretary-Treas., A. F. Meisky, Elizabeth, N. J.
New York State Nurserymen's Association—President, E. S. Osborne, Rochester, N. Y.; secretary, H. B. Phillips, Rochester, New York. Next meeting September. Probably at Utica.
Ohio Nurserymen's Association—President, T. J. Dinsmore, Troy, Ohio; secretary, W. B. Cole, Painesville, Ohio.
Oregon—Washington Association of Nurserymen—President, C. F. Breilhaup, Richland, Wash.; secretary, C. A. Tonneson, Tacoma, Wash.
Pacific Coast Association of Nurserymen—President S. C. Miller, Milton, Oregon; secretary-treasurer, C. A. Tonneson, Tacoma, Wash. Place of next meeting to be decided later.
Pennsylvania Nurserymen's Association—President William Warner Harper, Philadelphia. Secretary, Henry T. Moon, Morrisville, Pa.
Southern Nurserymen's Association—President, O. W. Fraser, Birmingham, Ala.; Vice-president, H. C. Caldwell, Atlanta, Ga.; Secretary and Treasurer, O. Joe Howard, Pomona, N. C. The next meeting is to be held in Birmingham the 21st and 22nd of August.
Tennessee Nurserymen's Association—President, A. I. Smith, Knoxville, Tenn.; secretary-treasurer, G. M. Bentley, Knoxville, Tenn.
Tennessee State Florists' Association—President, Karl P. Baum, Knoxville, Tenn.; secretary-treasurer, G. M. Bentley, Knoxville, Tenn.
Texas Nurserymen's Association—President, William B. Munson, Denison, Texas; secretary-treasurer, J. M. Ramsey, Austin, Texas.
Western Association of Nurserymen—President, Lloyd C. Stark, Louisiana, Mo.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by

THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

Advertising rates will be sent upon application. Advertisements
should reach this office by the 20th of the month previous to the date
of issue.

Payment in advance required for foreign advertisements. Drafts
on New York or postal orders, instead of checks, are requested by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., January 1918

Happy New Year

To "carry on" the best he knows how
"CARRY ON" is about all the nurseryman can do under
present conditions. The temptation
to "lay down" on the job, if it were possible, is very great
just at the present time. No labor, lessened demand for
nursery products, uncertainty of transportation, and that
uncertain feeling of not knowing what is coming next;
all have a tendency to make one pessimistic but in spite
of all it is up to the nurserymen to carry on. In the
present upheaval thousands are devoting themselves un-
selfishly to the welfare of their country even to the extent
of giving their lives.

The nurseryman knowing how indispensable his goods
are to the future welfare of the country can not and
must not be a slacker. Munitions have the right of way
during this period of destruction but the building period
will come and it won't do to be without material.

It is very necessary for a nur-
seryman to look upon a plant
from a purely commercial point of
view, because in that direction lies his bread and butter,
but there is no reason at all why he should not know as
much as possible in a botanical, geographical, and his-
torical way as well. Every bit of knowledge helps and
if he can keep the right balance his pocket-book need not
suffer by his inclination to go botanizing when he should
be attending to his cultivating.

He may not have much time or the inclination to go
very deeply into the biology and physiology of plants, but
he certainly ought to be able to diagnose a plant at a
glance; if it is annual, bi-annual or perennial; if it is a
plant that grows in dry situations in its native habitat or
if it has water associations; which would likely be the

most successful method of propagation.

If the knowledge is of no use to him, it has at least a
broadening effect on the mind, and makes him see things
not visible to the other man. Apart from any value
such knowledge may have, it is at least interesting when
you see a tree to know whether it is a native or not and if
it is not native to what part of the world it belongs.

A good plantsman can almost tell in what section of the
country he is by the trees and plants he sees, even the
casual observer notes as he travels south when the holly,
Magnolia grandiflora begins to appear, or as he goes west
through the Alleghenies notes the Hemlock, Rhododen-
dron and Mountain Laurel, or north the Paper Birch and
Balsam Fir. He will also notice when nearer the haunts
of men, the ever present alien Norway Maple. If he is a
close observer he will also note the change in the species
of oaks from the white, red, scarlet oaks of the north to
the pin, willow, laurel-leaved and water oaks of the
south and the change in form and habit of those widely
distributed trees, such as the Juniper, Elm, Sugar
Maples. The above mentioned, of course are very con-
spicuous, but when it comes to plants less so, it is only
those that are really interested who will be attracted to
them. It is not necessary to know them as individuals,
to be able to recognize the isothermal groups and those
that have water associates or claim the desert as their
native habitat. They have their ear-marks that readily
tell the interested plantsman much. Take for instance,
the Cactus and those plants that have thick, fleshy leaves
and stems. Nature has built them that way so they can
economize on their liquids. They don't grow in places
where there is much frost because it would freeze the
stored moisture, and they do grow in places that get
very hot and dry or they would not have to store it.

Plants that grow in dry and cold places often have
corky tissue, such as the *Euonymus alatus*, corky Elm,
thorns like the hawthorns or a woolly covering to the
leaves like many alpine. These are all means to re-
duce the escape of moisture and lessen the transpiration
in times of drought and fit the plant to withstand the
extremes of drought and cold.

The one big truth the plantsman must grasp before he
can get a comprehensive knowledge of plants, is that
nothing in the plant world, however insignificant, is an
accident or arbitrary, but all according to a discoverable
law and usually evolves around their existence.

The old idea that the pulp of the apple was created es-
pecially for man's benefit is a foolish one. The apple
tree has an entirely different idea in mind and that is the
preservation of the pips to reproduce its kind. The
shape, color and texture, leaf, petal and twig is a definite
result or purpose in connection with the plant's existence
and the man who can read nature's book can learn so
much quicker how to turn nature's laws to his own sel-
fish purpose, whether it be in increasing the bushels per
acre, or growing XX trees in the shortest possible time.

The real plantsman can almost tell at a glance to what
section of the world many plants belong by their appear-
ance, although he may never have seen them before.

The Eucalyptus and Acacia of Australia typify the
flora of that country to his mind equally as much as do
the oaks, maples, the Eastern States of America or the
Palms and Bamboo the tropics.

Deans of the Nursery Business

It is with much pleasure we have been permitted to publish the photograph of George Achelis, proprietor of The Morris Nursery Co., West Chester, Penna.

Mr. Achelis is a nurseryman all the way through, and never so happy as when meeting his brother nurserymen at conventions, or entertaining them when they come to-

Paschall Morris from whom the name had its origin. He was succeeded by J. L. Darlington & Co., who in turn were succeeded in 1866 by Robert Otto and George Achelis under the firm name of Otto & Achelis.

George Achelis purchased the shares of Robert Otto in 1875, thereby becoming the sole owner.

In 1906 a company was formed and incorporated un-



Mr. George Achelis, Morris Nur. Co., West Chester, Pa.

gether at the various trade meetings, or meet at his home in West Chester.

Geniality and optimism seem to be his leading traits and make him much beloved by all who come in contact with him.

The Morris Nurseries were first established in 1847 by

der the name of The Morris Nursery Co. which lasted for six years, when George Achelis bought all the stock and dissolved the corporation again becoming sole owner.

The Morris Nursery Co. is no longer a company and the owner is contemplating omitting the word "company" from the name.

The Laws of Today and the Nursery Industry

(An Address delivered before the California Association of Nurserymen at San Jose, October 10-13, 1917.) By George H. Hecke, State Horticultural Commissioner, Sacramento.

IT was my intention to have appeared before you at your last meeting at Santa Barbara for the purpose of reporting to you, but unfortunately for me a critical situation in connection with the importation of cotton seed had arisen in the Imperial Valley, that made my presence necessary at Calexico during the time of your meeting, so I requested Mr. George P. Weldon, Deputy State Horticultural Commissioner, to represent me at that meeting. This he did very gracefully and effectively, judging from your annual report.

I very much regret that this executive work prevented my being with you, but the executive work must be carried on even in a state official's office if results are to be obtained; and because we are busy men—you and I—I feel gratified that at last the suggestion is discussed here that the fruit growers, nurserymen, and horticultural officials should unite in the future in a joint convention. This is as it should be. I fully believe in having the joint convention, or rather two conventions held at the same time and same place with several joint sessions. Many of the misunderstandings and much of the distrust that may exist now and then between nurserymen and horticultural officials will then rapidly disappear, and the results of a better understanding will indeed be of much value to horticulture as a whole. It will give us an opportunity of discussing the shortcomings of the nurserymen's methods as well as the faults of the state and county inspection service.

I believe that a better understanding and closer insight into your ambitions and aims can be reached by a closer acquaintanceship, hence I have suggested the attendance today of the chief officials of the state commission of horticulture. Mr. Frederick Maskew, the Chief Deputy Quarantine Officer, is here to take part in the discussion following this paper, and he is fully able to answer your questions on state quarantine. Mr. George P. Weldon, the Deputy State Horticultural Commissioner, will speak to you, if you so desire, on standardization. Mr. Harry S. Smith, Superintendent of the State Insectary, can inform you on the work on parasitic insects that is now carried on by himself and his assistants. In addition to these gentlemen, I thought it well to have with us the field deputies of the state commission, Mr. R. P. Cundiff and Mr. A. S. Hoyt. Mr. Hoyt is well known to the southern nurserymen, and has recently returned from Florida where I requested him to study closely and report on the citrus canker infestation existing in the Gulf States. I thought it best to have Mr. Hoyt with us to explain to you, if you so desire, the enormous cost of the co-operative attempt of the U. S. Department of Agriculture and the Gulf States to control and eradicate citrus canker. His research confirms our impression of the great loss that the citrus industry and the nurserymen of Florida are suffering. The control and eradication of this disease means also the complete eradication of the

infected orchard or nursery trees, with no compensation to the unfortunate owner.

Citrus canker was unknown seven years ago. It was introduced in nursery stock from the Orient, and was rapidly dispersed on nursery stock through the different territories of the state and became so serious that the U. S. Department of Agriculture was forced into action. The department appropriated \$550,000 to which was added \$195,000 by the Florida Legislature and \$100,000 by the citrus interests of the state.

All trees that are found infected, whether in nurseries or groves are immediately destroyed by burning as they stand in the ground, the kerosene torch being used for the purpose. The total number of bearing trees thus destroyed by burning from May 1st, 1914 to August 31st, 1917 amounts to 243,838; the total number of diseased trees in the nurseries destroyed from May 1st, 1914 to August 31st, 1917 is 2,611,614.

This is an example of what may happen to us in California unless we stand united in maintaining strict quarantine and inspection service. The cost of lax quarantine in Florida has been enormous, and her growers and nurserymen have learned from this bitter experience that a strong quarantine and inspection service is needed, and hence, at the present time, the appropriation for horticultural inspection in Florida greatly exceeds that of California for such work. The total number of inspection employees is 316 and all are absolutely under the direct control of the Florida Plant Commissioner.

Having learned a severe lesson from this experience, the State of Florida has perhaps today a stricter inspection service than we have in California. The very fact that the responsibility is vested entirely in the state makes the Florida system a strong one. We in California, who claim for our state the merit of having started the first effective quarantine service in the world—and the best—must admit that our county inspection system, though adequate for the present time, is not equal to that of our sister state.

During the last fruit growers' convention, and also during the nurserymen's convention, this subject of improvement was thoroughly discussed, and curiously enough the desire for a more uniform system was expressed at these different conventions, whether held by fruit growers or by nurserymen. Through this mutual desire for improvement there has been a growing tendency of growers, horticultural officials and nurserymen to draw closer together and work toward a more harmonious future; and why should we not do so? Your California Association of Nurserymen has been established for the protection and promotion of the sale of California fruit trees and ornamental plants; the state and county officials are charged by law with the protection and promotion of the plant industry of the state; the fruit growers of the state are also deeply concerned about the

safety of their plantings; they help pay for the maintenance of the horticultural inspection service, largely provide the trade that makes the nursery business profitable, and also have to bear the burden if the laxity of horticultural inspection and the carelessness of nurserymen permits the infestation of clean localities.

And surely the commercial grower knows what pest control costs. Let us take for example the cost of fumigation in the citrus districts of California, which by careful estimates is shown to amount to one and one quarter million dollars a year; this cost is merely for controlling some scale pests of the industry. Add to that the everlasting cost of controlling the mealy-bug, root borers, or root aphids, or other pests distributed by nursery stock, and it is clearly shown that careful inspection is absolutely necessary for the protection of the fruit interests. And this protection for the nurserymen (as shown by Florida's experience) is very necessary, for in the case of a district quarantine, when the nurseryman would suffer the entire loss of his stock through condemnation or through regulations against shipping, his loss would probably be as great as that of any other single interest.

This is now generally understood and admitted, and the demand for a uniform and safer inspection system was agitated at the 1915 fruit growers' convention at Visalia. The result was the appointment of a representative committee on horticultural legislation, which consisted of representatives of the fruit industry, of nurserymen, and horticultural officials; and much commendation is due them for their unselfish labor in revising the horticultural code of the state.

In the opinion of some representatives this committee did not go far enough; the suggestion was made that the power of controlling the county inspection service be vested in one central authority, the State Commissioner of Horticulture, and no doubt such action would bring about the best and most effective results, not only from the standpoint of efficiency, but also from that of economy. It would avoid duplication of efforts and confusion of authority and bring relief from vexatious difficulties in many cases where the opinion of one county horticultural commissioner may differ materially from the opinion of a county horticultural commissioner of an adjoining county. And it is admitted that such differences of opinion, honestly held, have wrought hardships upon the nurserymen as well as upon the fruit shippers. However, the fact that the old structure of horticultural laws has stood the test of time for many years and the foundation of the structure is still sound and solid induced your legislative committee to improve it rather than to plan an entirely new one. Perhaps the principal reason why the legislative committee did not consider the adoption of a new set of laws was the fact that the legislature of 1917—which was pledged to economize on the state's resources—in all probability would not have consented to the necessary appropriation for paying the county commissioners from the state funds and placing them under the immediate control of the state commissioner of horticulture.

I am pleased to be able to report that the horticultural committee worked together in harmony, and whenever the horticultural officials and nurserymen members of

this committee disagreed three commissioners and three nurserymen were appointed a committee to settle these disputed points, and it may be interesting to you to know that a nurseryman was the chairman of this committee; perhaps you will be able to guess the name of this nurseryman without any great effort.

Not only were the horticultural quarantine laws effecting the nursery interests considered by this committee but the fresh fruit and standardization acts affecting the fruit growers were also greatly strengthened and perfected.

While you, gentlemen of the nursery profession, may often have thought that the horticultural code of California was created merely for the purpose of annoying you or providing obstacles in the way of your business enterprises, I desire to point out to you that the fruit growers voluntarily created the standardization act and placed themselves exactly under the same system of inspection as you have; in other words the careless fruit grower, who is shipping to the market immature, diseased, or wormy fruit, will have to submit to the same strict regulations of the horticultural inspection service as apply to the careless nurseryman who endeavors to ship trees or plants that are diseased or covered with insect pests.

It is quite true, that there have been many instances where arbitrary action of commissioners or inspectors, when unreasonably executed, has caused material losses to the nurserymen or fruit shipper. However, in spite of these failings you will admit that our horticultural system and our inspection service as a whole have been successful, and I firmly believe that you will stand united with the fruit growers in giving the service your best support in the future.

Speaking for the state commission—and also, I am sure, for the county commissioners—I will say that we do not believe in arbitrary and unnecessarily harsh action in the case of accidental and involuntary infringement of the law—but I feel certain there will be no sympathy from your ranks in cases of unlawful intent, or action by a guilty party, where summary measures by condemnation and destruction of infested nursery material would be necessary.

A little later Mr. Hoyt may have an opportunity of speaking to you about the strong inspection measures that have been adopted by the State Plant Commissioner of Florida, and of which the main features are as follows:—

1. All certificates must be purchased from the state nursery inspector, and are good only as long as the nursery remains in a satisfactory and clean condition.
2. Certificates are consecutively numbered, and a record is kept of the numbers issued to each nurseryman.
3. Each nurseryman must account satisfactorily for each certificate received, and can account for certificates used on nursery stock only by sending to the nursery inspector a duplicate of the invoice covering the shipment, which invoice must show the serial number of certificate used on the goods covered by that invoice.

Let us hope that such strict measures, which are so

onerous to the legitimate nursery interests may never have to be adopted in California.

I will now briefly touch upon the changes in the state and county horticultural commissioners acts, in both of which you are deeply interested.

1. The State Commissioner Act provides for the employment of two more field deputies whose duty it will be to aid the county horticultural commissioner to help enforce standardization, county inspection, state quarantine and other laws relating to horticulture and primarily and principally to bring about the greatest possible uniformity in inspection work throughout the state.

2. The California nurserymen are now required to register with the state commissioner of horticulture and each will be given a special license number, said number to be attached to every shipment of nursery stock. Nurserymen outside of the state must also secure permits before they can do business in California.

This regulation has not been adopted or suggested for the purpose of providing a revenue for the state commissioner of horticulture—as the charge for registration is only nominal—but the main purpose of the provision is to keep track of all engaged in the nursery business whether temporarily or permanently. As you know, in the large cities of California, nurseries are conducted by parties who are responsible to a far greater degree, for the spread of insect pests than are the established business interests here represented. For the purpose of following up infected shipments from irresponsible nurserymen it is well to enforce a proper registration. By studying the new edition of the State Horticultural Statutes we find that this amendment requiring registration of California nurserymen is not entirely clear in its meaning. I will therefore, issue a set of rules defining the obscure parts of the amendment, and I have not done this sooner because of my desire to request this convention to appoint a committee of nurserymen to meet with me to assist in the difficult task of formulating rules and regulations.

The county horticultural commissioner act has been strengthened.

1. It provides that the State Board of Horticultural Examiners may now appoint a county horticultural commissioner upon the refusal of the board of supervisors in a county that is legally entitled to the services of such an official.
2. This act makes a lien on property to cover the cost of eradication or control by the county horticultural commissioner take precedence over and be paramount to all other liens except the lien of taxes.
3. For the purpose of preventing spread of pests through inter-county shipments, since the county quarantine by the board of supervisors has been abolished, it was necessary to adopt the principle of state quarantine in the county horticultural commissioner's act. This adoption of the state quarantine provision makes possible the same relation to inter-county shipments that the state quarantine law provides for inter-state shipments. This provision will stand the test of court, and is necessary to protect one locality of our state against another. Statutory provision has been made for holding shipments of plants, trees, etc., at the point of destination until they have been inspected by the

county horticultural commissioner, and uniform methods of treatment and disposal of infested shipments have been provided.

4. In addition to this the county horticultural commissioner is charged with the control of rodents and weeds, largely for the purpose of making his services to his county of the greatest economic value.

This practically ends my remarks on horticultural legislation, so far as it affects the interests of the nurserymen. Many other points of interest may be brought out by the discussion following.

In conclusion I will say that my success as a business fruit grower is largely due to my training in the nursery business in Germany, France, and ending with my graduation from the Royal Botanic Gardens of Kew, England. Thus I have a natural sympathy for the profession, and this sympathy and my absolute confidence in the splendid future of your labors gives me the assurance that the co-operative efforts of the State Commission of Horticulture will meet with your full approval and because of my appreciation of the greatness of your work and the importance of it in further developing the resources of our glorious state, the state commission will spare no efforts to make the application of the state inspection laws as fair and as uniform as is consistent with the preservation of the safety of our horticultural interests, the greatest on earth.

Answers to Correspondents



Will you please tell me what should be the advance of the retail selling price over that of wholesale so that I could make a fair profit?

BERKLEY.

Ans. This is a vexed question, and one which has many phases.

You will have to figure out for yourself what it costs to do business and then be governed accordingly as it will depend largely on the kind of trade you are catering to.

Three to three and a half times will be a very good basis to figure on until actual figures are on hand. This advance on the single rate only. You could possibly handle quantities profitably by doubling or selling at 100 per cent advance.

Will you kindly advise the best method of storing perennial plants.

E. B. H.

Ans. Many kinds of hardy herbaceous perennials cannot be stored very satisfactorily.

As a rule those having thick fleshy roots such as paeonies, German iris, Platycodon hollyhocks can be carried all right in a storage house.

Herbaceous plants vary so greatly and each kind needs to be handled a little differently from the other that it is difficult to give methods that would be successful with them all.

On the whole you will find digging in the fall and

bedding in cold frames where they can be covered with sash and given other protection is the method that will suit many of them. Some kinds will not even stand this treatment, especially those kinds that are of a creeping nature and do not form a good crown or rootstock.

You will more than likely find that it is better to dig as needed in the spring.

THE CUMBERLAND NURSERIES DOES SOME NATIONAL ADVERTISING

There came to our desk a circular letter from the Cumberland Nurseries, Winchester, Tenn., that is something out of the ordinary and shows at least this particular nursery knows the kind of information that needs to be disseminated by National Advertising.

Create a demand for apples and the demand for trees will take care of itself.

The letter contains so much pithy information, we publish it in full:

NAVY BUYS PINEAPPLE

"Washington, Aug. 9 (To Philadelphia Public Ledger) —The Navy Department today placed orders for 1,687,500 pounds of canned pine-apple, a year's supply for the Atlantic fleet and East coast Navy yards and stations. Five firms with canneries in Honolulu received the order. Orders for a similar supply for the West coast yards will be placed later."

Why should the government buy an exotic fruit like the pine-apple and neglect the AMERICAN APPLE, overlooking the importance of feeding our fighting men food which is native to the soil in which they were reared? To class the apple as a luxury, to be relegated to the canteen, is a colossal dietetic blunder. Have you read Mr. Herbert Hoover's statement that

"The apple is a very important article of diet, more important even than the potato, especially in time of war, and much of the suffering in Belgium was due, not to lack of sufficient food, but inability of the Relief Commission to supply fruit."

Congressmen and senators might demonstrate their usefulness by passing a law to the effect that—

"APPLES SHOULD BE ISSUED AS DAILY RATION TO EVERY AMERICAN SAILOR AND SOLDIER DURING THE PROGRESS OF THE WAR."

Letters from all over indicate that our customers have a fair 1917 fruit crop and have been getting good prices. The prices we feel have come about largely through intelligent co-operation of growers.

At the nursery this year, we had an unsatisfactory planting period, but since June the growing season has been very compensative and stocks of all kinds have made an uncommonly fine growth.

Two years ago, through an apparent over-production (it is a long story and a sad one for nurserymen) prices on apple trees sloughed off to a good deal less than cost of production, and inevitably, under the "curve" by which supply and demand seem to work, the planting of apple stocks was reduced to a minimum; coupled with these reduced plantings the country has experienced two bad springs for planting and very poor stands. The consequence is that the national association of nursery-

men in June reported that apple trees were in shortest supply of any nursery staple this season.

As for us, though, we have been "bulls on the apple tree," knowing that it would come back, and have kept our stocks up, so that for the fall of 1917, we are able to announce our usual quota in what we believe are the best apple trees that we have grown in several years.

The man who believes in thrift (if he thinks a moment) will see the wisdom of making his reservations for apple trees early, while the stock is complete and quality the very best.

"AFTER THE WAR WE SHALL STILL HAVE A COUNTRY." All thought is now concentrated on the huge job to which America has set herself. She has gone into the pool, the great contract over-seas. She is making enormous debts. Industries are expanding to handle expanding business and meanwhile adding to bonded indebtedness.

DO NOT FORGET, that because of all these expenditures that add nothing to the world's wealth, lean years will follow after the war. You will see restrictions on operating capital, the demand for labor will soften, and because these men that have been enticed away from the farm and the orchard will not be able to "see" revision downward of wages, they will come drifting back to the fields from which they started; farm labor will be plentiful and relatively cheap.

But there will be the same old crowds hanging to straps in street-cars, the same out-pourings from factories and offices and shops and schools, the same crowds, except increasing in numbers. And all of them calling for their three square meals a day. Wars may come and wars may go but

MAN MUST EAT.

And as all life, all good comes from the soil, so all healing and all financial re-adjustments, will have their beginnings in the products of the soil.

And no food products are more essential to health than the fruits of the tree. You know Moses laid down the first horticultural law, he placed a special obligation upon mankind for the preservation of the fruit bearing tree, in time of war,—

"—thou shalt not destroy the trees thereof, by forcing an axe against them; for thou mayest eat of them; and thou shalt not cut them down; for the tree of the field is man's life."

"CARRY ON" means not only that the bloody fight shall be fought to a victorious end; but that all the essential and constituent phases of the world's work shall go on. All food producing generations must be preserved, provision made for future food needs.

Take the apple. In 1910, only 46% of the farmsteads in the United States had bearing apple trees. We nurserymen all know that the planting has been far below normal in late years. Production had declined 16% and the population increased 21%, under the last census. In the past seven years, the population increase has been around fifteen millions; but the home production of apples has further declined. Figures do not lie, they tell the story of fundamental needs—and also opportunities.

Delicious, Staymans Rome Beauty, Grimes, McIntosh, Jonathan, York, Black Ben, Smokehouse, M. B. Twig,

Winesap, All the early kinds, we have never grown better apple trees in these varieties than we are taking up this fall. We sincerely hope that we may hear from you before the best of them are all out and gone.

THE CUMBERLAND NURSERIES,
Winchester, Tenn.

Obituary.

B. FRANK ALLEN

As we go to press we are advised that on December 19th Mr. B. Frank Allen, president and treasurer of the Allen Nursery Company, Rochester, N. Y., died at his home in that city.

MRS. W. B. COLE

It is with much sorrow we report the death of Mrs. Cole, wife of W. B. Cole, Painesville, Ohio. Mrs. Cole died November 12th at Lakeside Hospital, Cleveland, Ohio, where she had gone for what was considered a minor operation.

SAMUEL C. DE COU

Samuel C. De Cou, eighty-three, a widely-known nurseryman and fruit grower, died at his home, Pleasant Valley ave., Moorestown, N. J. He had been ill three weeks. Mr. De Cou was born in New Jersey and was a member of the Hicksite Society of Friends. He was a staunch Prohibition advocate and was a member of the New Jersey Horticultural Society. He is survived by a daughter, Mrs. Rachel L. L. Herr, and two sons, Clayton L. De Cou and Howard F. De Cou.

HARDY CHRYSANTHEMUMS

If we analyze public opinion we shall find that the Chrysanthemum stands very high in favor.

Out of the hosts of different kinds of flowers some groups stand out in great prominence, namely Roses, Carnations, Chrysanthemums, Orchids, Tulips, Narcissus, Sweet Peas, Paeonies, Iris, etc., and Chrysanthemums come easily among the first four. Some of the reasons that make it so are the time of year at which they bloom; range of color, variation, and size, adaptability, and ease of culture.

The outdoor hardy Chrysanthemums, being aliens in a strange land, too much stress should not be put upon Chrysanthemums being hardy. That they are hardy enough to stay out of doors all winter is attested by the many plants that may be seen in gardens, and have been growing there for years with little or no attention. At the same time many are killed during the winter.

The truth is, the plant is alien and is not fitted to hold its own or even to adapt itself to American conditions. If this were so our gardens would be full of them, and they would be found growing along the roadside and on vacant lots.

In one way they may be considered the result of an Oriental civilization, for which horticultural conditions have to be especially prepared, or at least especially selected.

The one main cause why they often get killed in the winter is because they are so shallow rooted. Most of the roots, being within three or four inches of the surface of the ground, are readily disturbed by the frost, and suffer from drought both in summer and winter.

This would naturally lead one to select a wet situation for them, but this would almost be sure to be fatal, as they are very impatient of stagnant moisture at the roots, especially in the winter.

The ideal position is a sheltered, sunny one, with rich, rather sandy soil, plenty of moisture during the summer, but well drained.

Get young plants in the spring; the best planting season being from about the 15th of April to the middle of May.

In backward localities planting may be continued through June with a certainty that the plants will flower well the following fall.

There is much confusion in the mind of the layman about the different groups, which may be described as follows:

The large-flowering sorts are best adapted for greenhouse culture and seldom do well when growing out of doors without some special protection.

The extremely large flowers are produced by taking off all the buds except one, so that all the strength of the plant goes to perfecting the one bloom.

Single-flowered Chrysanthemums:—These are becoming very popular. The public taste is reacting from such a surfeit of large blooms. Many of the single ones are vigorous growers and are adaptable for outdoor culture.

Hardy Pompon—These are the hardiest of all, and are generally known as the old-fashioned hardy Chrysanthemums. There are hundreds of varieties of them, varying in size from small button-like flowers to two inches or more across. What they lack in size, however, is usually made up in the profusion of bloom, and the color is just as varied and as great in range as in any of the groups.

Chrysanthemum time is when all Nature is changing her dress and the many varied colors and tints of the Chrysanthemum seem to blend beautifully with the autumn coloring of the leaves. All varieties may be planted together, with full assurance they will blend well.

The pinks and whites go well together, as do the yellows, bronzes and reds, but a jumble of all shades seems to fit out-door conditions at the time they bloom.

The following are some of the hardiest kinds that can be depended upon to live through the winter out of doors, if the locality and soil conditions are at all suitable.

Allentown—Golden bronze, semi-double, 2 in. diameter.

Alpha—Single white, yellow center, 2 in. diameter.

Autumn Queen—Large, rosy pink.

A. Neilson—Bright wine color with silvery reverse petals. New, large and distinctive.

Baby—Golden yellow, button type.

Brown Bessie—Beautiful, garnet-brown, button flower.

Corsican—Light pink, quilled petals, anemone-flowered.

Daisy—Tall, extra-large, single, white, yellow center.

Eleanor—Fimbriated flower, pure white petals, large, noticeable yellow center when fully open.

Eva—Large, true anemone flower, rose-pink.

Fremy—Beautiful terra cotta, large, full flower of great beauty.

Globe d'Or—Large, bushy, clear lemon-yellow.

Gloriosa—Large, double, wine colored, pencilled white. Suggests cactus dahlia.

Golden Gate—Large, semi-double, bright yellow, full center.

Golden Mlle. Martha—Small, double, clear orange yellow.

Golden Pheasant—Small, rich, yellow, reddish-brown center.

Henrietta—Bronze, yellow edge.

Hindu—Semi-double, scarlet-bronze, yellow center.

Julia Lagravere—Large, rich, velvety maroon.

Kadar—Mottled crimson and garnet. Early, a startling, vivid flower.

Lady Naylor—Large, double, soft LaFrance pink.

Ladysmith—Large, rosy-like, tinged salmon. A beautiful flower.

Lilia—Double, rich, velvety scarlet. Tall.

Model—Small, round, pure white. Early. Flowers in cluster.

Mrs. Porter—Good, bright bronze.

Nellie Rainsford—Red in bud, opening straw-tipped and suffused red.

Radianee—Semi-double, light pink, shaded darker. Yellow center.

Souer Melaine—Large, pure white. Splendid.

Strathmeath—Large, clear pink.

Sunset—Medium, single scarlet, clear yellow center. A striking flower.

Triumph d'Or—Bright yellow, large flower. Tall. Double.

Yellow Gem—Pure yellow, large, full flowers, 2 in. across.

NOTES FROM ARNOLD ARBORETUM

SOME AMERICAN HAWTHORNS. Among American Hawthorns are many species which are of exceptional value for the beauty of their abundant flowers, their bright-colored fruits and the brilliancy of their autumn foliage. A number of these plants can now be seen to advantage on the bank between the Shrub Collection and the Boston Parkway, and are best reached by the path leading to the right from just inside the Forest Hills gate. These plants were raised at the Arboretum from seed mostly planted between 1880 and 1885, and are therefore less than forty years old. None of these trees, however, have reached anything like their maximum size but are large enough to show their habit of growth and their character as garden ornaments. Hawthorns are usually long-lived plants, and individuals a hundred years old are not uncommon; and, although it takes several years to produce a good Hawthorn collection, once established the plants will go on improving and last for a long time.

Hawthorns are easily raised from seeds which require two years in which to germinate. Large specimens are easily transplanted, and all the species thrive in any well-drained soil. Growing naturally, the species are most abundant in those parts of the country where the soil is impregnated with lime, and they are therefore particularly suited to give beauty to the parks and gardens of a large part of the United States where the presence of lime and the character of the climate prevent the cultivation of several classes of plants on which the gardeners of the coast region of the continent depend.

CRATAEGUS NITIDA. This is a native of the bottom-lands of the Mississippi River near East St. Louis where it sometimes grows thirty feet high and forms a tall straight trunk. The wide-spreading lower branches and the erect upper branches form a broad, rather open unsymmetrical head. The leaves are long and comparatively narrow, and those near the ends of the branches are often deeply lobed; they are dark green and very lustrous, and turn yellow, orange or red late in October. The flowers are not more than three-quarters of an inch in diameter, and the scarlet oblong fruit rarely exceeds the length of half an inch. The flowers and fruit, however, are produced in great profusion; and, although many species have larger flowers and handsomer fruits, the habit of this tree, its beautiful foliage and its autumn color make *C. nitida* one of the handsomest Thorn trees. Many persons indeed place it with the six or eight most beautiful species of the genus.

CRATAEGUS PRUINOSA. There is a good plant of this widely distributed eastern species on the bank. It is a small, round-topped tree with wide, dark blue-green, lobed leaves which late in the autumn turn dull orange or orange and red. The flowers are an inch in diameter in few-flowered clusters, and very conspicuous from the large, deep rose-colored anthers of the twenty stamens. The fruit, which is often nearly an inch in diameter, is nearly globose, bright blue-green covered with a glaucous bloom, and five-angled at the end of September; later it loses its angles, turns orange color and finally becomes dark purplish red and very lustrous. Both when it is in flower and when the fruit is red this is a very ornamental plant.

CRATAEGUS APRICA. There are two plants of this species in this collection. They are interesting as representing a peculiar group of the genus (*Flavae*) which is confined to the southeastern United States. *C. aprica* is a tree sometimes twenty feet high in the low valleys of the southern Appalachian Mountains which are its home. This plant is attractive just now for the small leaves have turned bright orange and red and the branches are thickly covered with its small clusters of dull orange-red fruits. These plants were raised from seed presented to the Arboretum in 1876 by Asa Gray as *Crataegus coccinea*, the name by which most red-fruited American Hawthorns were known until the systematic study of the genus was undertaken some twenty years ago.

CRATAEGUS COCCINIOIDES. There is a good plant of this Thorn in this collection. It is a round-topped densely branched tree with broad, thin, dark green, ovate, lobed leaves from two to three inches long which are now bright orange and scarlet. The large flowers are pro-

duced in very compact, nearly globose, from five- to seven-flowered clusters and are conspicuous from the large size of the deep rose-colored anthers of the twenty stamens. The fruit which is a good deal covered by the foliage, ripens and falls gradually during the month of October and is subglobose, nearly an inch in diameter, dark crimson, very lustrous and erect on short pedicels in compact clusters. This handsome plant is a native of the region in the neighborhood of St. Louis. The compact flower and fruit clusters readily distinguish it from allied species.

CRATAEGUS SUCCULENTA. This is a good representative of a peculiar group of Thorns (*Tomentosae*), distinguished from the other groups by the deep longitudinal cavities on the inner face of the nutlets of the fruit. The leaves of this Thorn are thick, lustrous, dark green, elliptic in outline, lobed only above the middle, and not brilliantly colored in the autumn. The flowers with twenty stamens and small rose-colored anthers hang on long slender stems in many-flowered clusters. The fruit is two-thirds of an inch in diameter, scarlet and very lustrous, and its beauty is increased by the contrast of color with the dark green leaves among which it is suspended.

CRATAEGUS FECUNDA. This is also a native of the St. Louis region and is a good representative of the great *Crus-galli* Group of which the well-known Cockspur Thorn is the type. *C. fecunda* is a large, round-topped tree with lustrous leaves broadest at the apex, small flowers with rose-colored anthers in many-flowered clusters, and abundant orange-red fruits which droop on slender stems. Other plants in this collection to which attention is called are *C. prunifolia*, *C. Douglassi*, the black-fruited species of the Puget Sound region, of which there is a large specimen here, *C. rivularis* from the southern Rocky Mountain region, a smaller tree also with black fruit, *C. arkansas*, *C. Arnoldiana*, *C. Dawsoniana*, and forms of the European *C. oxyacantha*.

CRATAEGUS ON PETER'S HILL. A large number of Thorns in the Peter's Hill Collection have flowered this year and several of them are now bearing good crops of fruit. Of special interest just now are the plants of the *Intricatae* and *Uniflorae* Groups, many of which are covered with fruit. These groups are of particular interest to gardeners for, with a few exceptions, they are small shrubs and begin to bloom when only a few years old. The flowers which usually open later than those of most of the Thorns, are large and showy with either yellow or rose-colored anthers. The fruit, which is large and usually sub-globose, is on different individuals scarlet, crimson, orange-color, green or yellow, and the leaves of most of the species turn late in October to beautiful shades of orange, red or scarlet. This group of shrubs is at the eastern base of Peter's Hill on the lower side of the drive and near a large White Oak. Some of the species which are most attractive at this time are *C. fruticosa*, *C. Bissellii*, *C. Peckii*, *C. Smithii*, *C. foetida*, *C. modesta*, *C. nemoralis*, *C. cuprea*, *C. intricata*, *C. Boyntonii* and *C. Buckleyi*. Long overlooked by botanists, these little plants have not yet found the place in gardens which, when better known, they are destined to occupy.

CRATAEGUS PUNCTATA. There is a group of this Thorn on the southern side of the Overlook on Bussey Hill which well shows the variation in the color of the fruit on different individuals of this species. On some of these plants the fruit is red, and on others yellow, orange color or rose. *C. punctata* is one of the largest and most

widely and generally distributed of the species of the eastern states where it is often a tree thirty feet tall with wide-spreading branches which form a flat or round-topped head of great beauty. This species, which has been known for more than a century and is often cultivated, is peculiar in the fact that some individuals have flowers with rose-colored anthers and others have flowers with yellow anthers, and that the plants with the rose-colored anthers produce red fruit while those with yellow anthers produce yellow fruit.

CRATAEGUS CORDATA. Near the group of *C. punctata* on the Bussey Hill Overlook are two large plants of *C. cordata* or the Washington Thorn, as it is sometimes called. This is a narrow tree sometimes thirty feet tall with erect branches and small nearly triangular lustrous leaves which are now beginning to turn bright scarlet. The small globose fruits are also turning scarlet and will remain on the branches until spring with little loss of beauty. This is the latest of all the species of *Crataegus* in the Arboretum to flower. The only drawback to this handsome little tree is found in the brittleness of the branches which are often broken by high winds. A century ago it appears to have been frequently used in the middle states as a hedge plant.

STUARTIA PSEUDOCAMELLIA. This small Japanese tree is of interest at this time on account of the dark bronze-purple color of its autumn leaves which is unlike that of any other plant in the Arboretum. It should be grown, too, for its pure white eup-shaped flowers which resemble those of a single-flowered *Camellia*. This *Stuartia* is a narrow tree with slender erect branches and pale gray, smooth bark which separates in large thin plates. It grows slowly but is perfectly hardy.

ENKIANTHUS PERULATUS, or *japonicus* as it is perhaps better known, is unusually handsome this year, equalling and even surpassing the Highbush Blueberry (*Vaccinium corymbosum*) in the brilliant scarlet of its autumn leaves. Unlike *Enkianthus campanulata* it is shrubby in habit and forms a dense broad bush. The white bell-shaped flowers are attractive, but in the Arboretum the plants have not produced seeds, and this *Enkianthus* is therefore rare in American gardens. It is found, however, in all Japanese gardens where it is grown for its autumn colors and where it is usually cut into dense balls. The best collection of *Enkianthus* is on the lower side of Azelea Path, where several species are flourishing.

MANURES.

Farmyard manure is the safest and best of all fertilizers and unfortunately it is getting scarcer as the automobiles become more plentiful. It is a complete fertilizer in itself, containing all the plant foods from the soil, water and air, and in addition when it is plowed under it separates the soil, allows water and air to enter freely. By its decomposition it creates heat and warms the soil, carbonic acid is given off and in conjunction with lime plant foods made soluble and essential bacteria brought into being.

These important functions are not all produced by artificial fertilizers and for this reason they are not complete in themselves, but need the addition of green crop plowed under to bring the soil in good fertile condition.

Nitrogenous manures give luxuriance of growth.

When the foliage is dark green, the growth soft and sappy, it is pretty sure evidence there is abundance of nitrogen in the soil to check this rankness of growth; phosphates, potash and lime should be added to encourage the formation of flower and fruits.

Natural substances that supply nitrates are such as animal manures, fish, night soil, etc. In artificial form it comes in the form of nitrate of soda, nitrate of potash, sulphate of ammonia and other mediums. It may be added to the soil through the medium of muriate of potash, sulphate of potash and kainit.

Calcareous manures are of much importance to the soil, and are usually added in the form of hydrated lime. The value is not so much in the lime itself, as the chemical action it sets up. It liberates plant foods stored in the soil, making them soluble and so available to the plant. It follows that the constant use of calcareous manures tends to impoverish the soil unless other manures are added.

Phosphatic manures produce firmer growth than the nitrogenous manures and tend to an earlier production of flowers and fruit. Bones, superphosphate, wood ashes, basic slag are the chief source of supply of the phosphoric acid which is an ingredient of every part of a plant and so very essential.

Potash manures, nearly all soil contains liberal quantities of potash, but it is often locked up with other elements and not available for the plants until liberated by cultivation and the application of organic manures.

THE NON-WARRANTY CLAUSE

This clause has been bitterly attacked at times, and as strongly defended by the trade (both at home and abroad) as absolutely necessary to the existence of the seed trade.

An interesting point, which should be carefully noted by all concerned, is that the Government itself, now that it has joined the ranks of the trade, has adopted the non-warranty clause.

In the papers issued last week by the Food Production Dept. of the Board of Agriculture, to the horticultural representatives and others, giving particulars of its scheme for the distribution of seed potatoes, the following paragraph occurs (page 3, paragraph 15):—

“While the Department will take every reasonable precaution to secure sound ‘seed’ true to type, they give no warranty, expressed or implied, as to the quality, purity, or productiveness of the potatoes supplied under this scheme.”

Newark, New York, December 26, 1917.

Mr. Ernest Hemming,
Editor National Nurseryman,
Flourtown, Pennsylvania.

Dear Mr. Hemming:

The clipping above, taken from the “Horticultural Advertiser” of November fourteenth, one of the leading British trade papers, may interest your readers, particularly those who happen to recall the reckless and altogether gratuitous public statement by one of them that the nurserymen who took occasion to point out to their represen-

tatives in Congress some of the unworkable provisions of the Boreland Misbranding Bill, were desperately seeking to evade the just consequences of deliberate wrong-doing, in opposing a bill intended to correct irregularities which have brought the trade into disrepute, or something equally nonsensical.

The “misbranding” question has been up in England too; and now comes the British Government in an official circular of their Board of Agriculture in which they offer seed potatoes under the standard non-warranty clause used by the nurserymen and seedsmen whose acquaintance with business enables them to see the necessity for it. And it would not seem a rash prediction to say that if our own Government should find it necessary to take over the sale and distribution of certain garden- and field-seeds, we may see here the same governmental sanction and use of the disclaimer.

Yours truly,

JOHN WATSON.

CALIFORNIA RETURNS GIFT

Five and one-half million pounds of seed beans and 1,500,000 two-year-old French prune trees are being gathered in California for shipment to Northern France to rehabilitate the fields and orchards devastated by the Germans in their retreat.

The beans are pink and black-eye varieties, and the quantity is sufficient to plant 69,000 acres. The prune trees will convert 15,000 acres into bearing orchards within two years.

There is a bit of sentiment in California’s sending young orchards to France, as it was this war-torn republic that gave the State its first prune trees. This was in 1856, and since that time the prune orchards cover nearly 100,000 acres and bring to the growers more than \$10,000,000 a year.

If an average crop is raised from the California seed it will mean an addition to the food supply of France of more than two and one-half pounds of beans next summer to each of the 40,000,000 residents. Shipments will begin immediately after the new year.—*Philadelphia Record*.

Winter courses in agriculture including instruction in many of the branches of farming will be opened at the College of Agriculture, Ohio State University, Columbus, on January 7; they will continue through eight weeks, closing on March 1. The minimum age limit for entering the farm courses is 17; however, in view of the present necessity for the production of more food, provisions will be made for instructing farm men over draft age as well as any subject to draft. No previous high school or college training will be required for entrance.

Forty special lectures have been provided in addition to the courses in animal husbandry, farm crops, farm management, soil fertility, agricultural engineering, horticulture, vegetable gardening and poultry husbandry. Full information may be secured by writing to the College of Agriculture, Columbus, Ohio.

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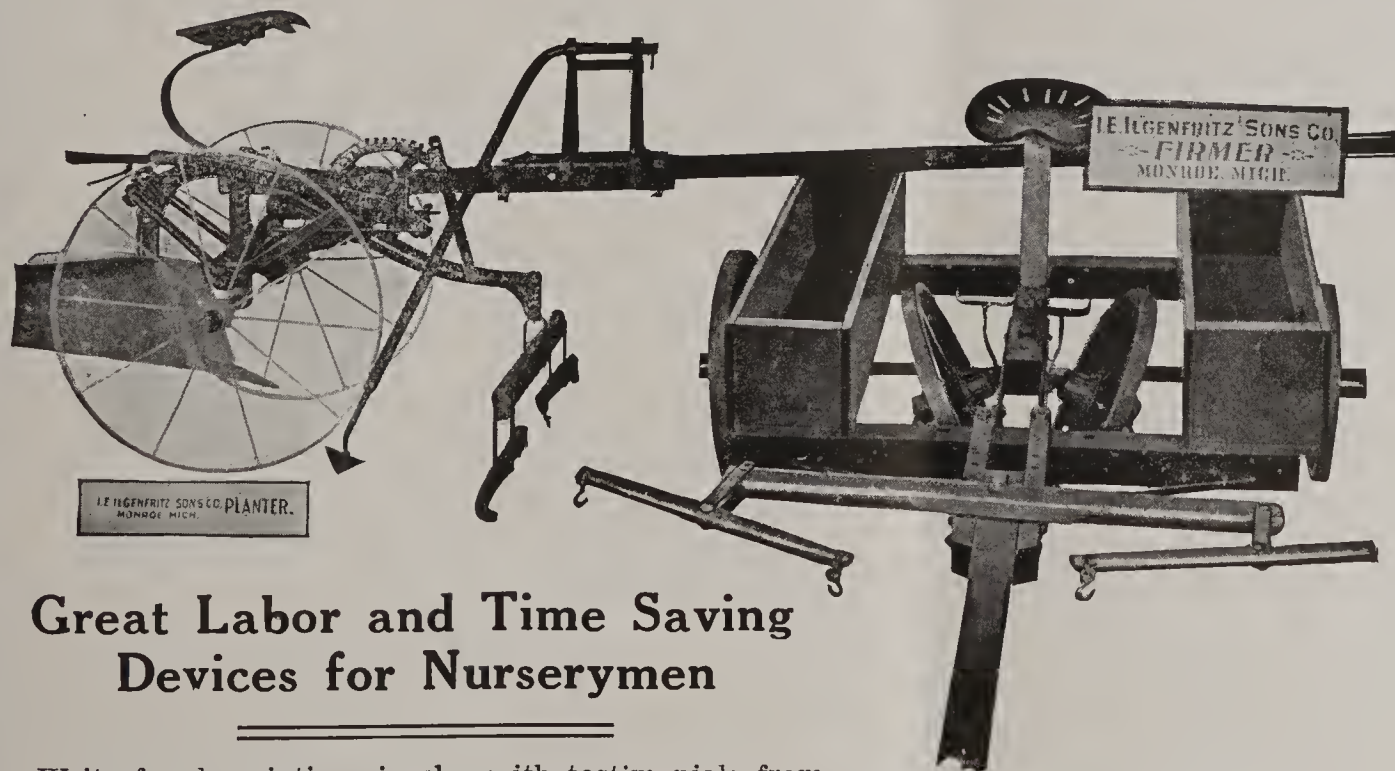
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This is one of the most important features of the new edition. It constitutes a general running account of the classes, orders and groups of plants, with a brief sketch or characterization of 215 of the leading families, comprising those that yield practically all the cultivated plants. These family descriptions give the botanical characters; the number of genera and species and the ranges; a list of the important genera; brief statements in regard to the useful plants; and diagrammatic illustrations.

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There are 24 colored plates; 96 full page half-tones; and more than 4000 engravings which serve as guides in the text. These color plates constitute the best possible combination of expert horticultural color photography and color printing, with a mastery in selection such as only Dr. Bailey's knowledge can supply.

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This is an analysis of all technical terms that are used in the work and in similar works. It comprises botanical and horticultural terms with brief definitions.

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In Volume I is inserted a list of between 2000 and 3000 Latin words used as species—names of plants, giving the English equivalent or translation and the pronunciation.

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Special effort has been made to secure the best cultural advices for the plants requiring peculiar or particular handling. Here are some of the titles of these articles: Ants; Autumn Gardening; Bedding; Diseases; Drainage; Floral Designs; Formal Gardening; Hotbeds and Coldframes; Insects; Landscape Gardening; Lawn Planting; Orchards; Rock Gardening; Sub-tropical Gardening; Tools and Implements; Village Improvements; Window Boxes, etc.

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The final volume contains a complete index to the entire work, enabling the reader to locate volume and page of any subject he has in mind.

The publishers of THE NATIONAL NURSERYMAN have made arrangements with The MacMillan Company to supply a limited edition of this set to their readers on monthly terms—see coupon—and we can unqualifiedly recommend the work.

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3,000 "	..5-6		2,000	6	-8
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3,000 "1 1/2- 2		700	3- 4	"
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4,000 Hackberry	3	- 4 ft.	2,000	8	-10
3,000 "	4	- 5	2,000	1 1/2- 2 in.	
4,000 "	5	- 6	WALNUT—BLACK		
1,000 "	6	- 8	2,000	4- 5	
500 "	8	-10	8,000	5- 6	
"	1 1/4- 1 1/2		2,000	6- 8	
375 "	1 1/2- 2		100	8-10	
350 "	2	- 2 1/2	SEEDS		
350 "	2 1/2- 3		Russian Olive		
100 "	3-4 in. Cal.		Ash Seed		

Gurney Seed & Nursery Co.
YANKTON, SOUTH DAKOTA

A Pruning Book That Will Build Business for You



Here is a book that will help you by helping your customers.

It is a practical guide to right pruning and growing. It will tell every purchaser of your products how, when and where to prune for the most vigorous and healthy growth.

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We have a plan of co-operative selling and advertising of which "The Little Pruning Book" is an important part. It's a plan that will help you sell Nursery Stock and help us sell Pexto Pruning Shears.

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Native Trees, Shrubs and Vines

At Special Prices
WHOLESALE ONLY

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C. Van Kleef & Company
Nurserymen

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Representatives:—

John Van Kleef and John A. Driesprong

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14 Stone Street - - New York

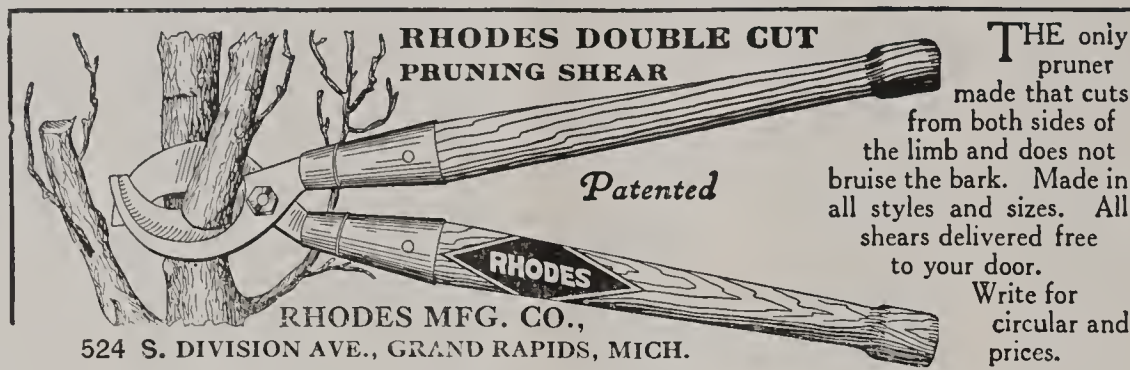
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We offer a Complete
List of

Shade Trees, Shrubs, Evergreens

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THE only
pruner
made that cuts
from both sides of
the limb and does not
bruise the bark. Made in
all styles and sizes. All
shears delivered free
to your door.
Write for
circular and
prices.

The Morris Nursery Company

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Offer at reasonable prices the following:—

Catalpa Bungei, 2 yr., 3 yr., 4 yr., Heads.
Oriental Planes
Silver Maples
Norway Maples

All of different sizes. Write for prices.

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Two year root cuttings. Just the thing for fall
shipments, as they will mature early. Our stock
includes about 100,000 each of Mersereau and
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PRICED TO SELL

California Privet—all sizes—BEST stock in South.
Silver Maple—large or small sizes in car lots.
Spirea Van Hout, 5-6 feet, twice transplanted.
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Red Bud—Cercis canadensis. Straight and smooth.
Lombardy Poplar—low branched.
White Flowering Dogwood—4 feet.
and other seasonable stock.

Write us

H. F. Hillenmeyer & Sons
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"In the Heart of Kentucky's famous Blue Grass Region."

400 ROSES

Fall Price-list
New and old sorts

Get in on our early summer propagation,
—place order for spring lining out stock.

THE LEEDLE FLORAL COMPANY
SPRINGFIELD-OHIO.

TREE SEED

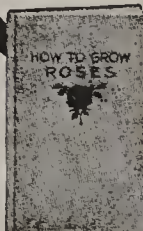
Large assortment of Tree, Shrub and Fruit
Seeds for ornamental and forestry purposes.
Send for catalogue. **CONYERS B. FLEU, Jr.**
Germantown, Philadelphia, Pa.

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IT is an invaluable working manual for rose lovers. Tells
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gardenward again.

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Send for a trial lot of these sure-fire money-makers today,
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We'll gladly send you further terms and a copy of the book
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EVERBEARING STRAWBERRY PLANTS

If you need Everbearing strawberry plants to fill spring
orders or if you wish to increase your planting in nurseries,
we can supply you with genuine PROGRESSIVE Everbearing
plants, guaranteed to be TRUE TO NAME and handled so as
to reach you in best of growing condition. Write for prices.
We have been growing and breeding the Everbearing straw-
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We invite a personal visit to our grounds during fruiting sea-
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Seneca Nurseries
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Let us make you quotations on
 Apple, Std. and Dwf. Pear, Cherry, Plum,
 Peach, Quince, Apricot, Small Fruits, Grape
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The leading standard varieties, grown at SELBYVILLE, DELAWARE, the largest strawberry center in the U. S.
 ASPARAGUS ROOTS, 1 and 2 year.
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The universal verdict of all who sample this new berry fruit is: "The most delicious berry I ever sampled." Has the market to itself on account of its extreme earliness and exquisite flavor. Fruit large, a deep vermilion red, very showy, great shipper, enormously productive. Not a dew-berry, blackberry or raspberry, but a distinct new berry fruit. Three plants for one dollar to any P. O. in the U. S.

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A Magazine of Trade News and Cultural Information for the NURSEYMAN, FLORIST, SEEDSMAN and GARDENER. A reliable exponent of advanced Trade and Progressive Horticulture.

Published Weekly

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Under this title we publish the most reliable, progressive and up-to-date trade paper in the country, with departments covering the Nursery, Florist, Seed Trade and Allied Industries. With a paid up subscription and distribution list of 10,000 copies, nearly every copy of which is to men in business for themselves the worth of our columns will be readily appreciated. The editor of our Nursery Department is and has been for years, JOSEPH MEEHAN, of Philadelphia.

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We have an exceptionally fine lot of new crop seed, and suggest the advisability of your having shipment made now while the seed can be had and give plenty of time to get them through. Sample and price on request.

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Apple, French, Japan and Kieffer Pear, Myrobolan Plum and Quince Seeds. Also Tree, Shrub and Evergreen Seeds in a large assortment. My Catalogue contains complete list with Prices. Send for a copy.

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 NEWARK, N. Y.

ESTABLISHED 1893

THE NATIONAL NURSEYMAN

INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock. Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed.

Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all leading nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock offered for sale.

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Hatboro, Penna.

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Palms and General Decorative Plants, **INSPECT**
Conifers, Shade and Ornamental Trees **INVITED**

ASK FOR WHOLESALE CATALOGUE

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We are selling Agents for the best made red burned pure **CLAY POTS AND PANS**, shipped direct from Pennsylvania Pottery to purchasers; for list and terms address

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Yours in the

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Would be Read by Thousands

Address HATBORO, PA. office for Rates

A Large Stock of Apple, Pear, Cherry and Peach Grape Vines, Blackberry and Raspberry Plants

And a general line of **ORNAMENTAL TREES** and **SHRUBS**. All stock clean and thrifty, the best that can be grown.

T. B. WEST, Perry, Ohio.

Fruit Trees, Roses, Manetti Stocks

in heavy quantities

JOHN WATSON, Nurseryman,

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Is our sole agent for United States and Canada

S. SPOONER & SONS,

The Nurseries - - Hounslow,

Est. 1820 England

W. T. HOOD & CO. OLD DOMINION NURSERIES

RICHMOND

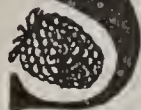
VIRGINIA

We offer for Fall 1917 and Spring 1918, general line of Nursery Stock—California and Amoor River Privet, Norway Maples, Oriental Planes, Evergreens, etc.

We will have a heavy stock of Peach Trees and Norway Spruces on which we can quote attractive prices.

We expect to be in position to offer Natural Peach Seed, crop of 1917. Send us your list for quotations.

SCARFF'S NURSERY



Headquarters for

Small Fruit Plants

1200 Acres "At it 25 Years"

Strawberries
Raspberries
Blackberries
Dewberries
Berberry

Currants
Gooseberries
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Spirea

Rhubarb
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100,000 transplanted Raspberry, Blackberry and Dewberry plants for retail trade. See wholesale list before placing your order.

W. N. SCARFF & SONS

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OHIO

W. FROMOW & SONS

Azalea mollis, **Rustica** and **Ghent** in all the leading varieties, grown from layers not grafted.

Manetti Stocks clean and well rooted for grafting or open ground.

Standard, Climbing, Weeping and Dwarf **Roses** in great variety **Rhododendrons**, the cream of the Hardy American varieties.

Andromeda floribunda, **japonica**, and **speciosa**, bushy budded plants.

Kalmia latifolia.

Green and River's Purple Beech in all sizes up to 12 feet.

Prices and full particulars on application.

WINDLESHAM NURSERIES

Surrey, - - - England.

Portland Wholesale Nursery Co.

122½ Grand Avenue, Portland, Oregon

General Nursery Stock and Nursery Supplies

APPLE, one year, large assortment.

PEAR, one and two year, mostly Bartlett.

CHERRY, one and two year, general assortment.

PRUNE, one year, mostly Italian and French.

GOOSEBERRY, one and two year, Oregon Champion.

SHADE TREES in assortment.

ROSES, field grown, large assortment.

Our Trade List is now ready; a postal card will bring it.

ALL "AMERICAN NURSEYMEN"

Wishing to do business with Europe should send for the

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This is The British Trade Paper being read weekly by all Horticultural traders. It is also taken by over 1000 of the best Continental houses. Annual subscriptions to cover cost of postage, \$1.00. Money orders payable at Lowdham, Notts. As the H. A. is a purely trade medium applicants should, with the subscription, send a copy of their catalogue or other evidence that they belong to the nursery or seed trades. Address

Editors of the "H. A." LOWDHAM, NOTTS, ENGLAND

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Largest assortment in New England. Evergreens, deciduous trees, both common and rarer varieties. Sturdy, choice stock that can be depended upon. Send for catalog and special trade prices.

The Bay State Nurseries

North Abington
Mass.

SHRUBS

This New England soil and climate produce fine sturdy shrubs. Special trade prices. By the thousands, hardy Native and Hybrid **Rhododendrons**—transplanted and acclimated. Send your lists let us est.

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Spring 1918

Est. 1884

400 Acres

Capital \$60,000.00

WE have our usual line of Cherry,
Sweet and Sour; Apple, Peach,
Pear, Plum, Quince; also Shrubs and
Ornamentals.

ALL UPLAND GROWN

We will be glad to send you our
wholesale price list.

MALONEY BROS. & WELLS CO.

Dansville, New York

Upland grown trees transplant best.

NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER—We offer all or any part of an
accumulation of long Nursery Bands one inch in width and
sixty inches to one hundred and twenty inches in length,
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Plain, Painted, Wired with Tinned or Copper Wire and
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Prices as low as First-Class Work and Unequalled Promptness in

Delivery will justify.

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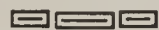
P. O. Address, DERRY VILLAGE, N. H.

Western Union Telegraph, DERRY, N. H.

Notice to the Trade



Herewith we inform our esteemed patrons
that from this date Mr. L. Van Heerde is no
longer connected with our firm. We kindly
request you to send all communications direct
to our head office only, at Gouda, Holland.



A. KOLOOS & CO.

Export Nurseries, Gouda, Holland

ORNAMENTAL STOCKS

NURSERIES

420 ACRES

WE GROW

FRUIT TREE STOCKS—All Sizes.

300 varieties of Conifers, 1 to 4 years old.
1200 varieties of Ornamental Trees and Shrubs, 1 to 3 years old.
1600 varieties of New & Old Ornamental Trees and Shrubs in all Sizes.
250 varieties of Climbing Plants.
400 varieties of Conifers, 1 to 4 feet high.
400 varieties of Perennials.
800 varieties of New and Old Roses.

We Have No Agents.
Write direct to us and
ask for **WHOLESALE**
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BARBIER & CO., Successors

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"Harrison Grown"

You know we have made an enviable record for quality in the Norway Maples that have been sent from our nurseries in past seasons.

We have blocks of them that are the finest we have ever seen. They are 8 to 16 feet high, with perfectly straight trunks. The heads are broad, symmetrical, with lower branches at least 6 feet above the ground.



This one block contains fifty thousand superb "Harrison Grown" Norway Maples

CAR LOTS IS OUR SPECIALTY. SEND YOUR ORDER AS SOON
AS YOU CAN, SO YOU WILL BE SURE TO GET SOME OF THESE
SPLENDID TREES.

WE INVITE INSPECTION

VISIT US

HARRISONS' NURSERIES,

Berlin,

J. G. Harrison & Sons,

Maryland



THE NATIONAL NURSERYMAN

FEBRUARY 1918



Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

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Established 1847.

Offers a Fine Stock of

*Peach, Gooseberries,
Currants, Berberis,
Spirea Van Houtte,
Other Ornamental Shrubs,
H. P. Roses, Etc.*

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.
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MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

Shenandoah, Iowa

Our Specialty

A large and complete line of high quality Nursery Stock for the wholesale trade.

CHERRIES; large stock in all varieties.

BLACKBERRIES; surplus of Ancient Briton, Rathbun, Erie.

ELM; American White—in car lots.

APPLE SEEDLINGS

Large supply of best quality. Grades unsurpassed.

APPLE GRAFTS—made to order. If short of labor, let us make your grafts for you. Satisfaction guaranteed.

Ask for Trade List and Bulletins. Send us your list of wants.

Nursery Trade

depends largely
on Confidence.

BUSINESS SECRETS REVEALED



FELIX & DYKHUIS

WHOLESALE NURSERIES

Boskoop, - - Holland

Ask for Our Beautifully Illustrated Catalogue

—OUR BULLETIN—

coming right along now, with a complete list of High Grade Stock, such as,

ORNAMENTAL SHRUBS
(a long list)

SHADE TREES

EVERGREENS

FIELD GROWN ROSES

CLIMBING VINES

BERBERRY THUNBERGII

CALIFORNIA PRIVET

FRUIT STOCK

(a fine assortment)

Read through carefully. All in storage except Evergreens and a few Ornementals. You want Early Shipment. We can make it.

Please let us have your order at once. Thank you.

C. R. BURR & CO.

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Strawberry Plants

FROM NOVEMBER FIRST TO MAY FIRST

We supply leading fruit growers, nurserymen and dealers with fine strawberry plants.

Our plants are healthy, heavily rooted, and guaranteed *true-to-name*.

We grow all the leading standard and everbearing varieties.

Get in touch with us regarding your supply for next season. Shipments made to you or direct to your customers. Packing unsurpassed.

The W. F. ALLEN CO., 100 Market Street, Salisbury, Maryland

L. R. TAYLOR & SONS
Topeka, - - Kansas

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SPRING OF 1918

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A fine lot of
Apple Seedlings
Japan Pear Seedlings
Forest Tree Seedlings

=====
ALSO
APPLE TREES
PEACH TREES
PEAR TREES
CHERRY TREES
FOREST TREES

Hardy Jap. Lily Bulbs

Shipment at once, or later from storage

LILIUM AURATUM, 7-9 in., 8-10 in., 9-11 in.
" ALBUM, 7-9 in., 8-10 in., 9-11 in.
" RUBRUM, 7-9 in., 8-10 in., 9-11 in.
" MELPOMENE, 8-10 in., 9-11 in.
" MAGNIFICUM, 7-9 in., 8-10 in., 9-11 in.
" ROSEUM, 7-9 in., 8-10 in.
" GIGANTEUM, MULTIFLORUM, etc.

Case lots only, write for import prices.

Bamboo Cane Stakes

Natural color, 6 feet, 2000 per bale.

" " 8-9 feet, 600 per bale.

Dyed green, 2 ft., 2½ ft., 3 ft., 3½ ft., 4 ft., 5 ft., etc.

Write for prices and particulars

McHUTCHISON & CO. THE IMPORT HOUSE
95 CHAMBERS ST., NEW YORK

PAINESVILLE NURSERIES



The way we grow Hydrangea P. G. at Painesville Nurseries

WE DESIRE TO ATTRACT ATTENTION

to the following items which we have in unusual abundance, besides our usual run of choice first-class stock in all lines.

IN FRUIT TREES, we are longest in Sour Cherries, Pears (both standard and dwarf), Plums; and are well stocked with all kinds of **Small Fruits**.

ORNAMENTAL TREES: Our biggest untouched blocks are in European Sycamore, American Elm, Horse Chestnut, and Lindens, with a large and very complete assortment of all other kinds of shade and lawn trees.

IMPORTED STOCK: If the cele-

brated "Nieuw Amsterdam" ever safely arrives in America, we will have for seasonable delivery a full supply of Azaleas, Boxwood, Kalmias, Rhododendrons, Magnolias, and Japan Maples. If it doesn't get through,—we are going to be short.

SHRUBS: Hydrangea P. G., 1½ to 2 ft. and 2 to 3 ft. We are headquarters for choice, home grown **Tree Form Hydrangeas**; exceptional value in 3 to 4 feet grade. California Privet, 2 year, in 12 to 15 in., 15 to 18 in., and 18 to 24 inch. **Cornus Elegantisima Var.**, 3 to 4 feet.

Strong in the following popular **VINES**: Honeysuckle Halleana, Chinese Twining and Aurea Reticulata. Clematis Paniculata, 2 year. Bignonia Radicans (Trumpet Flower). Celastus Scandens.

HARDY PERENNIALS: German Iris, Yellow Day Lilies, Japan Lilies, Auratum, Rubrum and Album.

Hardy Ornamental Grasses. Delphiniums. Hardy Asters. Funkia Undulata Variegata.

Please give us a chance to bid on your want lists.

THE STORRS & HARRISON CO.

NURSERYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

The
Preferred
Stock

The
Preferred
Stock

Our January Bulletin

Has lately been mailed to the trade.

Did you get your copy?

It will be gladly sent on request,—if you are in “the trade.”

Is your name on our mailing list? It should be for both your good and ours.

Our Bulletins of unsold stock are issued at frequent intervals all winter and spring. They give latest assortments and prices on all stock we have to offer.

They usually include many scarce and desirable articles which are not easily located elsewhere.



Jackson & Perkins Company

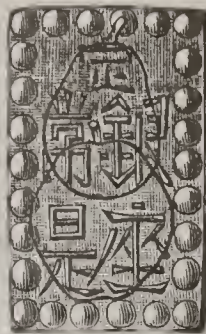
NEWARK

NEW YORK

The
Preferred
Stock

The
Preferred
Stock

Heikes—Huntsville—Trees



Established 1872

1500 Acres

**FRUIT TREES
ROSES and other
ORNAMENTALS**

For the wholesale trade.
All of our own growing.

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

Hill's Evergreens

You can work up a good profitable trade in Evergreens if you have the right kind of stock. Our main specialty for over half a century has been the propagation of young Evergreen stock for the wholesale trade in immense quantities at low prices.

We have all the leading varieties in small sizes, for all purposes, suitable for lining out to grow on for your trade.

Nurserymen who have heretofore depended on Europe for their young Evergreen plants can now be assured of a good reliable source of supply right here in America, and we solicit the opportunity of quoting on your requirements.

“Made in U. S. A.” and “American Stock for American Planters” should, from now on, more than ever, be the slogan of American Nurserymen for it means “money saved in the long run” to start with nice, strong, sturdy, vigorous American-grown stock which has been produced right here in America.

YOU want to keep posted on Evergreens;

WE want to become better acquainted with you;

Let's get together.



The D. HILL Nursery Co., Inc.

Evergreen Specialists

LARGEST GROWERS IN AMERICA

Box 401

Dundee, Ill.

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of Own Root Roses

ORNAMENTAL TREES SHRUBS
BERRIES CLEMATIS
EVERGREENS PEONIES PHLOX

and

HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY

GENEVA, N. Y.

70 Years

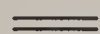
1000 Acres



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE



THE

North-Eastern Forestry Co.

CHESHIRE

...Connecticut...

J. H. Skinner & Co.

Topeka, - Kansas



Apple Seedlings

Mahaleb Seedlings

Forest Tree Seedlings—Catalpa, Elm, Maple, Mulberry, Black Locust and Honey Locust.

Fruit Trees—Apple, Cherry and Kieffer Pear. Rhubarb, Divided Roots, True Myatt's Linneaus.

Grapes

Shade Trees

Flowering Shrubs

Paeonias.

MORE PERFORMANCE:

Exhibit "B." "The car has arrived—and such a car! We can not thank you too much for the highest class stock we have received from any nursery. The minute we opened the door, we could tell that that car came from a first-class nursery....To show our appreciation of the stock and service you have given us, we beg to enclose herewith with our check to cover your invoice, a nice little order for spring delivery..... It gives us great pleasure and a peaceful feeling to think that we have at last discovered a nursery which will not send out inferior stock in order to fill all orders—a nursery which grows its own plants and can therefore watch the stock which they send their customers, and be sure it is all first-class in every respect. ... With the ideal which you and ourselves have set, there is no reason why we should not continue a most pleasant and mutually profitable relationship."

Extracts from a letter written us by another car-load customer who "repeats" with a CL order for spring. For reasons entirely satisfactory to them and us, their name is withheld, by request, but any letter asking for further information or verification will be promptly forwarded to our good friends who will cheerfully endorse what they have already written us.

Notice—"the highest class stock we have received from any nursery." And also this—"a most pleasant and mutually profitable relationship." **Mutually.** A trade is like an egg; it isn't good unless it is good at both ends! Consider this expression too: "we have discovered a nursery which will not send out inferior stock." We are discovering ourselves to other discriminating buyers. **You** will be trading here "eventually, why not now?" Because the Plan and the Purpose and the Performance of Princeton are sound and based on modern and progressive merchandizing methods. Think about it.

This is from

PRINCETON NURSERIES

AT PRINCETON IN NEW JERSEY

February 1, 1918.

HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

Rawhide Brand of Shipping
Tags and Tree Labels

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.

West Chester, Pennsylvania

DO YOU NEED

SPIRAEA ANTHONY WATERER 2 to 2½ ft., and 2½ to 3 ft., bushy.

SPIRAEA THUNBERGII 2 to 2½ ft., and 2½ to 3 ft., bushy.

LONICERA TATARICA, red, white and pink 2 to 3 ft., and 3 to 4 ft.

HYDRANGEA PAN. GRAND. 2 to 3 ft., and 3 to 4 ft.

PERSIAN LILAC 2 to 3 ft., and 3 to 4 ft.

PHILADELPHUS GRANDIFLORUS, CORONARIUS and **LEMOINEI** 2 to 3 ft., and 3 to 4 ft.

VIBURNUM PLICATUM 3 to 4 ft., and 4 to 5 ft.

WEIGELA ROSEA 4 to 5 ft.

SNOWBALL, Common 2 to 3 ft., and 3 to 4 ft.

HIGH-BUSH CRANBERRY 2 to 3 ft., and 3 to 4 ft.

Or any other shrubs. Send us a list of what you require, giving quantities and sizes, and let us quote you. It will be worth while. We have the stock.

SMALL STOCK FOR PLANTING IN NURSERY ROWS.

We have it. The best ever. Did you get our price list? A postal card request will bring it to your office. Stock selling fast. Supply limited. Don't put it off and be disappointed.

Thomas B. Meehan Co.,
WHOLESALE NURSEYMEN

Dresher, - Penna.

Planting Stocks

They should be ordered NOW for timely delivery. No trouble about arrivals from France; the tonnage required for our men and materials sent "over there," insures ample space returning. Prices being practically the same, it is a question of quality and grades and packing and service. We merely remind our customers of the way their previous orders have been handled; those who have not yet tried us can get satisfactory assurances as to our goods and service from the one hundred sixty leading American nursery firms we have supplied. Glad to put YOU in touch with our satisfied customers in YOUR own state. Mr. Delaunay's complete list will be sent on request. But—get that order placed!

John Watson & Company

NEWARK - NEW YORK

November First

For Spring of 1918

*WE will have our usual line
of Ornamentals, Shade
Trees, Perennials, Apple,
Plum, Cherry, Peach, etc.*

C. M. Hobbs & Sons

Marion County

Bridgeport, - - Indiana

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa

LOOK FOR IT

The first of this month we issued our general wholesale trade list. Did you get your copy?

If not, a postal will bring one to your desk. There are lots of interesting offerings in this list and every nursery buyer should have a copy at hand; 24 full pages pricing complete assortment for you to choose your shorts and wants from.

Write today if you cannot locate your copy.

SHENANDOAH NURSERIES

D. S. LAKE, Pres.

SHENANDOAH, IOWA

SPECIAL—For Early 1918 Spring Shipment

No. 1. Berry Transplants.

Teas Wpg. Mulberry—4½ to 7 ft.—2 yr. heads.

Buddelyea—Butterfly Bush, 2 to 4 ft.—at a bargain.

Spireas—Anthony Waterer, Van Houtte, 1½ to 4 ft.

Hydrangeas—Tree (4 ft.) Arborescens (Hills of Snow) Bush 2-4 ft.

Weigalias—Eva Rathka Rosea, Var. Candida, 2 to 4 ft.

Wick Hathaway Potato—Best Yields, Eater, Looker, Keeper.

SMALL FRUIT PLANTS

Current, Gooseberry, Grape Vines, Blackberry, Raspberry, Strawberry, of leading best kinds, including FALL BEARERS.

Your Want List will receive prompt attention—You never Delivered finer stock, nor received quicker service than you get from

Yours Truly

Wick Hathaway's Berry Plant Nursery

Madison,



"THAT'S ME"

Ohio.

The Best In

Nursery Products

We carry a full line of fruit and ornamental trees, evergreens, shrubs, etc. Send us a list of your wants.

A FEW SPECIALS

Oriental Planes from 1¼ to 3 inch caliper. A large stock of Sugar Maples, American Elms, Beech grafted River's, and Fern-leaved, Double Flowering Japan Cherries, Prunus Pissardi, Flowering Apples, Flowering Peaches, Magnolia Tripetela, Japan and American Judas, Japan Walnuts, American Arbor Vitae, Hemlock and Norway Spruce, Altheas, Forsythias, Philadelphus, Viburnum Plicatum, Weigela, Eva Rathke, etc.

Downing Gooseberries, 2 years No. 1.

HOOPES BRO. & THOMAS COMPANY

THE WEST CHESTER NURSERIES

Established 1853

West Chester, Pa.

Incorporated 1907



BERRY'S Wholesale Nursery

Small fruit plants in variety; rhubarb; horseradish; California Privet; Barberry Thunbergii; Hydrangea P. G.; Spiraea Van Houghti; Peonies, etc.

See list before placing your order.



P. D. BERRY

Dayton

Ohio

FRAMINGHAM QUALITY NURSERY STOCK

for

YOUR RETAIL TRADE

WE grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Our Spring wholesale list will be issued shortly.

In the meantime let us quote on your needs for the coming season.

Framingham Nurseries
FRAMINGHAM
MASS.

STRAWBERRY PLANTS

All the leading Standard and Everbearing varieties. Have a nice stock of PROGRESSIVE, SUPERB AND AMERICUS, true to name. My plants are well-rooted, strong and healthy. They are pleasing a large number of Nurserymen and Dealers and they will please YOU and YOUR CUSTOMERS if you use them. IT WILL PAY YOU TO USE THEM. Will ship to you or direct to your customers. Send your list for prices.

LEAMON G. TINGLE, 165 Railroad Ave., Pittsville, Md.

35,000 PEONY ROOTS FOR SALE

Must reduce my Stock
40 varieties to select from. I have them from
the cheapest to some of the finest in the world.
Guaranteed true to name.
Send for list of varieties and prices
Address
P. D. BERRY,

Dayton

Ohio

FAIRFIELD NURSERIES

FRUIT AND SEED FARMS

OFFER for Spring 1918

GRAPE VINES—One and two years old. Varieties
largely Moore's Early, Concord and Niagara.

Also Scarlet or Crimson Clover Seed and Cow Peas.
Free from weed seeds, all recleaned and guaranteed first
class.

Correspondence solicited. Price list upon request.

CHAS. M. PETERS

P. O. Address, Salisbury, Wicomico County, Md., R. F. D. 3

Long Distance Phone and Telegraph, Salisbury, Md.

P. OUWERKERK,

No. 216 Jane St., Weehawken Heights, Hoboken, N. J.

Rhododendrons, Clematis, H. P. Roses, Hardy Azaleas,
Paeonies, Magnolias, Box Trees, Fancy Conifers, Hydran-
geas and Shrubs, our specialties at our HOLLAND NUR-
SERIES. Some of the goods on hand here during the
packing season.

PRINTING

Catalogues
Stationery
Business Forms



The Robinson
Publishing Co.
Hatboro, Pa.

Specialists in Nursery Printing
Ask for Prices. We are the printers of this Magazine

We have the following list of shade and ornamental
trees, transplanted unless otherwise noted. Send in your
list of wants for special prices.

300 Ash	.....8	-10	250 Honey Locust	4	- 5
3,000 "	.....6	- 8	200 "	"	5 - 6
3,000 "	.....5	- 6	100 "	"	1 1/4- 1 1/2
7,000 Boxelder	.....4	- 5	100 "	"	1 1/2- 2
9,000 "	.....5	- 6	SOFT MAPLE		
10,000 "	.....6	- 8	20,000 Sdg.....	3	-4
200 "	.....8	-10	30,000 " & Trnspt.	4	-5
4000 Catalpa Speciosa	..4-5		3,000	5	-6
3,000 "	"	..5-6	2,000	6	-8
3,000 "	"	..6-8	400	1 1/4-1 1/2	
400 "	"	1 1/4-1 1/2	300	1 1/2-2	
5,000 Elm	.....5	- 6	300	2	-2 1/2
3,000 "	.....6	- 8	200	2 1/2-3	
1,000 "	.....8	-10	MULBERRY		
3,500 "	.....1 1/4- 1 1/2		4,000	12-17 Sdg.	
3,000 "	.....1 1/2- 2		700	3- 4 "	
700 "	.....2	- 2 1/2	Poplar—Carolina & Norway		
4,000 Hackberry	3	- 4 ft.	2,000	8	-10
3,000 "	4	- 5	2,000	1 1/2- 2 in.	
4,000 "	5	- 6	WALNUT—BLACK		
1,000 "	6	- 8	2,000	4- 5	
500 "	8	-10	8,000	5- 6	
"	1 1/4- 1 1/2		2,000	6- 8	
375 "	1 1/2- 2		100	8-10	
350 "	2	- 2 1/2	SEEDS		
350 "	2 1/2- 3		Russian Olive		
100 "	3-4 in. Cal.		Ash Seed		

Gurney Seed & Nursery Co.

YANKTON,

SOUTH DAKOTA



CALIFORNIA PRIVET, all grades at reduced prices.

ROSES, Crimson Rambler, Dorothy Perkins, Excelsior,
Flower of Fairfield, Climbing American Beauty. These
can be supplied in quantities. A general line of or-
namental and evergreens. Your order will be handled
by experienced men. Write for prices.

Southern Nursery Co.

WINCHESTER

TENNESSEE



When writing to Advertisers please mention the National Nurseryman.

REMEMBER!

If its a hardy perennial or so called old fashion flower worth growing, we have it in one shape and another the year round. We have the largest stock in this country, all Made in America, and our prices—

Why say more here. Send for our Wholesale price list of varieties and benefit from the opportunities this affords you.

Our motto: "Maximum Quality, Minimum Cost."

Address, R. W. Clucas, Mgr.
Palisades Nurseries, Inc. Sparkill, N. Y.

You can save **Time and Money**

If you use our neatly packed

SHEET NURSERY BURLAP

Put up in bales

In various size sheets ranging in sizes from 24x24 to 40x40 in.

Write for particulars

Sarachan & Rosenthal
64-66 Hanover Street
Rochester, - - New York

Vincennes Nurseries, W. C. REED, Prop.
VINCENNES, - - INDIANA

Prepare for Spring by securing the best Cherry to be found. Our blocks of Cherry are the largest in the U. S. and quality the best. While the U Boats have been sending Mahalebs to the bottom the past two years, we have been fortunate in securing our usual supply and will have a splendid lot of trees to offer in the following:

CHERRY TWO YEAR general list of varieties
 CHERRY ONE YEAR 11-16 up Sweets and Sours
 PEACH ONE YEAR leading varieties
 PLUM Japans, European and Hansen Hybrids
 COMPASS Cherry and Apricots
 APPLE leading varieties in connection with other stock only
 Grafted English Walnuts and Northern Pecans

Special prices to car lot buyers on large orders

BOXWOODS

ROSES

Amaryllis belladonna
 (Belladonna Lily)

Abies nordmanniana
 (Nordmann's Silver Fir)

Spartium junceum
 (Spanish Broom)

Choisya ternata
 (Mexican Orange)

We have a most complete line of Ornamental Stock for Florists and Nurserymen. Write for New Catalogue and Price List.

CALIFORNIA NURSERY CO.
NILES - - - CALIFORNIA
 Established 1865

We are now ready to quote lowest prices on
FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities. Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries
Sparta, Ky.

THE WESTMINSTER NURSERY

J. E. Stoner, Prop.

WESTMINSTER - - MARYLAND

We offer for Spring 1918

200,000 CALIFORNIA PRIVET, 1 year and 2 year
 1/2 million ASPARAGUS, 2 year and 3 year
 DOWNING GOOSEBERRY PLANTS, 2 year
 BARBERRY THUNBERGI, 2 and 3 year transplanted

Can supply the above stock in car load lots or less, also, have a large stock of Rhubarb, Cumberland Raspberry Plants, Spireas, Deutzia Assorted, nice specimen plants. Evergreens, Horse Chestnut, N. Maple, Lombardy Poplar and Planes, etc.

We will make attractive low prices for early orders
 Send List of Wants

For FUMIGATION With
HYDROCYANIC ACID GAS
"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by
The Roessler & Hasslacher Chemical Co.
100 William St. - - New York, N. Y.

WOOD LABELS

For Nurserymen and Florists

The kind that give satisfaction

Facilities for the handling of your requisite, combined with the quality of our product is unsurpassed.

Samples and prices are at the command of a communication from you.

Dayton Fruit Tree Label Co.
South Canal St., Dayton, Ohio

W. B. COLE

Avenue Nurseries

Painesville, Ohio

COLD! We will admit, but not so cold at Painesville as West, South and East. That is why we can grow such a large assortment; why our trees and shrubs come through the winter sound and bright.

THERE'S A REASON! Look up Painesville on the map. You will find it located at the most southern point in the Great Lakes region. This means advantage of latitude over other Great Lakes sections, as well as the benefit of the influence of the Great Lakes on climate. This accounts for its being five to ten degrees colder in other parts of the country within two-hundred or three-hundred miles south of the latitude of Painesville.



STOCK! A full assortment, of course, we aim to fill nurserymen's and dealer's orders complete. This is an advantage that we can offer you. We want to especially mention a few things.

FRUIT

Pears—Standard and Dwarf. I know of no place where better pears are grown. Strong, smooth and sound to the tip.

Peaches—There may have been as nice blocks of peaches last season as ours, but we failed to see them. Good height and no stung or crotched trees. A good assortment of the 9-16 " grade in storage.

Wilma Peach—A late Elberta. We do not claim to excel in introducing new sorts at high prices, so we are offering this variety at little more than price of common sorts. It is bearing in the noted island peach section, where growers know a good peach when they see it. Other peach sections will want the Wilma when they have had a chance to try it out.

Grapes—We are in the grape belt and grow the same high quality of roots that has made this section famous. A large stock of Concord grapes to offer.

Blackberries—Two year, root cutting plants. We have 50000 to 200000 each of Mersereau, Ohmer, Snyder and Taylor. These are in three grades—XX, suitable for fancy retail trade, No. 1 and No. 2 for general planting.

ORNAMENTAL TREES

Acer Saccharinum—Sugar or Rock Maple. Hundreds of strong, specimen trees, 2 to 4 " caliper. Native tree surpassing the Norway Maple in form and Stateliness.

Aesculus Hippocastanum—European Horse Chestnut.—Fine specimen trees, 2 to 4 " caliper.

Catalpa Bungei—Two year heads, straight stems.

Platanus Orientalis. European Sycamore Plane—Large stock of 8 to 10 and 10 to 12 ft. Extra smooth, fine stock.

Ulmus Americana. White or American Elm. Fine block of recently transplanted trees. All sizes up to 2½ inches.

ORNAMENTAL SHRUBS

Altheas—Both bush and tree form.

Barberry Thunbergi—All grades including 2 to 2½ ft.

Cornus Siberica—Several thousand plants 3 to 4 and 4 to 5 ft.

Elder, Golden—Large stock of extra strong plants.

Hydrangea P. G.—2 to 3 and 3 to 4 ft. in both bush and tree form.

Spiraea Van Houtte—4 to 5 ft. and smaller sizes.

Symphoricarpus Vulgaris—Red Snowberry. Will make low price on quantity of 2 to 3 ft. stock.

ROSES

Strong field grown stock. Large assortment.

EVERGREENS

Have been in great demand but a fair supply still on hand.

Large stock of Mahonia Aquifolia, 18 to 24 inches.

PERENNIAL PLANTS

Hardy Chrysanthemums, Shasta Daisy, Delphinium Chinensis, Hibiscus, Hemerocalis, Iris German, Iris Japan, Tritoma Pfitzeri, etc. Over two hundred varieties.



ASK FOR OUR TRADE LIST

When writing to Advertisers please mention the National Nurseryman.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK
The National Nurseryman Publishing Co., Incorporated

Vol. XXVI.

HATBORO, PENNA., FEBRUARY 1918

No. 2

LAWN SPECIMENS

A SUBURBAN residence or country house standing alone, without a tree near it, looks unfinished and bare. It matters little how beautiful the design or how well built, trees are needed to relieve its bareness or enhance its beauty and from this point of view, any tree is better than none, but it is just as true too many trees on a lawn are as bad or worse than none.

The exception, of course, is the house built in the woods.

The position of a tree in relation to the house is a very important matter, especially on a small lawn. The very

common practice of planting a Norway Maple or other dense common tree right in front of the house has little to commend it. While they are small, perhaps they are not so bad, but as soon as they get to any size, they hide the house, kill the grass underneath, and preclude any attempt to grow flowers or other attractive plants along the front of the house, usually just where they are needed.

When a tree is placed near the house it should be with a definite purpose, for shade, to soften the lines, or to



A superb specimen of the Weeping Beech (Fagus sylvatica pendula). All of the Beeches make fine trees for the lawn

frame it or perhaps to screen an objectionable view from some of the windows, and in every instance the tree should be selected and placed with that particular purpose in mind.

If for shade from the hot sun, those kinds which will break the rays of the sun and at the same time permit a free circulation of air are to be preferred, such as the Salisburia, Honey Locust, Pin Oak, and White Birch and they should be located so they will accomplish the purpose when it is most needed.

For softening the lines of the house the tall upright growing kinds such as the Lombardy and Bolleana Poplars, Pyramidal Oaks, Salisburia, etc., although an endless variety of trees may be selected for this purpose. There are kinds to harmonize with all styles of architecture.

To screen objectionable views of course evergreen sorts are the best as they are effective summer and winter.

While everyone is naturally a law unto himself as to the kind of tree he should plant on his own lawn, a good rule to follow is, not to plant a tree that is common to the neighborhood.

By building a house on a plot of ground, grading it and enclosing it, it has been separated from the surrounding country and calls for trees that are little dif-

ferent, some kind that will associate with the building rather than the native silva.

At the same time an extra fine specimen of any kind is not likely to detract from the place.

The subject of our illustration, the beech, stands out as one of the finest lawn specimen trees, not only for its great beauty, but also because it has so many good qualities from a practical point of view.

It is clean, long lived, comparatively free from disease and pests and will thrive in fairly dry places.

Like all hard wooded trees it is of slow growth, or rather slow in starting after transplanting, but it is worth waiting for.

While the American Beech, *Fagus ferruginea*, is a very fine tree, the European *Fagus sylvatica* seems to be more amendable to cultivation.

It is not everyone that cares for freak trees, such as weeping and those with colored foliage, but who could help but admire such a fine specimen as that shown in the picture.

The same is true of the Copper Beech and the Rivers Blood leaf Beech, they make such fine specimens and look so aristocratic that they seem to add dignity rather than a bizzare effect to a place.

Nurserymen Plan to Develop A Market

At last the much talked of co-operation of nurserymen to develop a market for their goods has crystallized into action.

Figuratively speaking, the nursery business is going to be put on the commercial map of the United States, along with other enterprising businesses.

Hitherto it has only been done by individual effort. Now it will be done broadly and comprehensively, so that every man, woman and child will be encouraged to give their innate love of growing things full play.

The movement is so important that it will mark the beginning of a new era in the business.

To those nurserymen, who have not been attending conventions, and noting the trend of the times—we would explain, the problem of how to give greater publicity and increase the demand for nursery products, has been recognized as the one vital need of the nursery business.

Every nurseryman, with enough gumption to be interested in the business, in, however, small a way, knows there is not one-twentieth part of the nursery stock planted there should be, for the well being of the country, and inhabitants thereof.

This movement is to remedy the evil.

When we stop to think that the chewing gum industry spends over two million to advertise one brand. The talking machine the same; Coco Cola some ten million, to acquaint the people with its merits, and to come nearer to our own products, the California Fruit Growers' Exchange, which began in 1907 with an expenditure of \$6900 and has an appropriation this year of \$400,000.

Through this advertising the consumption of Citrus fruits has increased enormously.

Following this example, the Northwestern Fruit Exchange has become the largest shipper of boxed apples in the world, and they don't feed so many to the live stock because the market is being developed through advertising. Does it not seem reasonable that the market for nursery stock can be greatly increased by proper publicity?

The Nurserymen's Organization for Market Development and Sales Extension will do this for you, and its up to you to support it, whether you do a business of \$5000 or \$100,000 a year. You will benefit whether you subscribe or not, so the only thing to do is to name the amount you feel you can afford to subscribe annually to this businesslike proposition, that the good work may proceed with a punch to it.

Below we publish a statement from the temporary committee which have been appointed to establish the organization on a business basis.

SUBSCRIBERS' ORGANIZATION OF NURSERYMEN FOR MARKET DEVELOPMENT

A Co-operative National Campaign to Create new Business for Nurserymen.

January 28, 1918.

To All Nurserymen:

In our conventions, in our conversation, in our letters to one another and to the trade press, we nurserymen have said a great deal about co-operation; and there has always been the thought apparent that this idea of co-

operation could be profitably expressed in an associated effort *to develop our market and to increase the use of our products* by means of a National campaign of education. This thought has been of slow but sure growth; it had already become a conviction and a fixed purpose; it remained only to translate it into action.

At a recent meeting of the Publicity Committee of the American Association of Nurserymen, the Chairman, Mr. F. L. Atkins, suggested that the sentiment in favor of such a campaign had evidently so far crystalized as to demand immediate and definite action; whereupon all those present agreed to become subscribers to a *Fund for Market Development*, themselves and all other subscribers to become missionaries to attend trade conventions and to invite all others to join with them, whose interests can be advanced through *promoting sales of nursery stock*. In this way, meetings of the Ornamental Growers Association, the Massachusetts Nurserymen's Association, the Pennsylvania Nurserymen's Association, the Western Association of Nurserymen, and the New Jersey Nurserymen's Association have been attended, the proposition presented and subscriptions obtained as shown on the accompanying list.

The subscribers have named this committee to call for subscriptions. It is proposed to raise a fund of \$50,000 a year for a period of five years; to ask all subscribers on May first to elect a Committee in the most democratic way, each subscriber having one vote, the Committee then selected to study and investigate the subject of National co-operative merchandizing campaigns and to devise a plan that will meet the needs of the nursery trade and serve fairly and equally the interests of ALL the subscribers to this Fund. The undersigned committee is temporary only, appointed to solicit subscriptions. We do not at this time propose any particular plan for market development; we think the plan should be worked out by a committee to be chosen later by ALL the subscribers to the Fund.

We present you the broad proposition of co-operative market development; in our opinion, there is nothing we nurserymen can do at this time of such vast possibilities, nothing that can advance the prosperity of the whole trade so surely, as this co-operative National campaign to create new business for nurserymen. Other trades have done the same thing and are continuing to do it; they would not keep it up without profitable returns; the florists, nearly related to us in interest, have already launched their campaign, confident that their fund will be oversubscribed, three-fifths of it being already pledged.

We nurserymen have contented ourselves with profitless competition for the *same business* and have overlooked the opportunity to unite and *make more business*.

Publicity is the greatest force in the world today; it creates armies, unmakes and remakes nations and draws anew the world-map. We nurserymen need publicity; we need to tell our hundred million people who we are and what we are doing and to what-degree we contribute and can still further contribute to the health of the Nation with orchards and fruit-gardens; in what ways we can surround the home with shade and beauty and make the highways inviting and the parks delightful. The outdoor idea is susceptible of profitable cultivation; every school garden club implants the love for growing things.

The field invites us; it is our field; we have only to use our opportunity. Ours is not an experiment; it has been tried; it is with us to demonstrate that we are capable of such constructive and co-operative action as other lines of business have found and used to their profit.

As to details: we suggest none; they will have to be worked out to fit our needs and by a committee to be selected by all the subscribers; we firmly believe in the IDEA and know it to be broad enough to include the interests of every man who gains his livelihood from the nursery business directly or indirectly.

Those who have already subscribed to the fund are not more enthusiastic than those whose names do not yet appear; they are merely early on the list because of being at trade conventions held in the few weeks of January since this committee set to work. These subscribers indicate in the most convincing way what they think of the proposition, by subscribing their money; their opinion is worth considering; they are *business men*; their names are *representative* of the best in trade circles; *they endorse the campaign and ask you to join with them* in putting it over in impressive fashion.

Are you with us?

We want \$50,000 a year subscribed by May first.

The money will be laid out by a committee in whose selection you will have an equal voice.

Think it over; think *quickly*; let's not give the campaign absent treatment and let's not talk it to death; we've done the talking already. Let's do it now. Notify any member of the committee of the amount you will subscribe *and then go out and get others* to join in the same way. The value of your subscription grows in proportion to the *whole sum*. In figuring the amount, *consider your business and its possibilities*. It is *not a contribution*, but an *investment* and a big one—\$50,000 a year; how much of that will you furnish *to help create more business*? How much of that you can get for yourself depends on you; how do you value the possibilities that lie in you and in your organization? This campaign will go over the top, but it must go quickly and handsomely in the spirit of the progressive business men who make up the nursery trade of today. Are you one of them? Money talks; speak up.

Respectfully,

F. L. ATKINS, E. S. WELCH,
J. EDWARD MOON, H. B. CHASE,
ROBERT PYLE, PAUL C. STARK,
JOHN WATSON.

Committee.

LIST OF SUBSCRIBERS TO THE MARKET DEVELOPMENT FUND

	Amt. per Year for five Years
Adams Nursery Co., J. W., Springfield, Mass. . . .	\$100.00
Andorra Nurseries, Chestnut Hill, Penna.	250.00
Barr, B. F., Lancaster, Penna.	25.00
Bernardin, E. P., Parsons, Kansas,	50.00
Bobbink & Atkins, Rutherford, New Jersey,	250.00
Brandley, James, Walpole, Mass.,	25.00
Breed, E. W., Clinton, Mass.,	25.00
Chase Nursery Co., Chase, Alabama,	250.00
Conard & Jones Co., West Grove, Penna.,	250.00

F. & F. Nurseries, Springfield, New Jersey,	250.00
Farr, B. H., Wyomissing, Penna.,	25.00
Framingham Nurseries, Framingham, Mass.,	500.00
Harrison & Sons, J. G., Berlin, Maryland,	500.00
Harrison Nursery Co., York, Nebraska,	50.00
Heurlin, Julius, So. Braintree, Mass.,	50.00
Hicks & Son, Isaac, Westbury, New York,	250.00
Hobbs & Sons, C. M., Bridgeport, Indiana,	100.00
Holsinger Bros., Rosedale, Kansas,	50.00
Hoopes, Bro. & Thomas Co., West Chester, Penna.,	250.00
Hgenfritz & Sons Co., I. E., Monroe, Michigan,	250.00
Jackson & Perkins Co., Newark, New York,	250.00
Kelsey, Harlan P., Salem, Mass.,	100.00
Keystone State Nursery Co., Pittsburgh, Penna.,	25.00
Littlefield & Wyman, No. Abington, Mass.,	20.00
Lovett, J. T., Little Silver, New Jersey,	100.00
Marshall Brothers Co., Arlington, Nebraska,	50.00
McColgan Nurseries, Red Bank, New Jersey,	10.00
McCormack, J. J., Lowell Mass.,	25.00
McFarland Co., J. Horace, Harrisburg, Penna.,	250.00
Meehan Co., Thomas B., Dresher, Penna.,	250.00
Moon Co., Wm. H., Morrisville, Penna.,	250.00
Mount Arbor Nurseries, Shenandoah, Iowa,	250.00
Mount Hope Nurseries, Lawrence, Kansas,	50.00
Muller, Adolf, Norristown, Penna.,	50.00
Massachusetts Nurserymen's Association,	100.00
Momm's Sons, Co., Irvington, New Jersey,	10.00
National Nurseryman, Hatboro, Penna.,	50.00
New England Nursery Co., Bedford, Mass.,	25.00
Princeton Nurseries, Princeton, New Jersey,	250.00
Reed, W. C., Vincennes, Indiana,	50.00
Rochrs Co., Julius, Rutherford, New Jersey,	100.00
Root, J. W., Manheim, Penna.,	10.00
Shenandoah Nurseries, Shenandoah, Iowa,	250.00
Sherman Nursery Co., Charles City, Iowa,	100.00
Smith Co., W. & T., Geneva, New York,	250.00
Storrs & Harrison Co., Painesville, Ohio,	150.00
Sonderegger Nurseries, Beatrice, Nebraska,	50.00
Stark Brothers, Louisiana, Missouri,	250.00
Stein, Geo. E., Wrightsville, Penna.,	5.00
ThurLOW's Sons, T. C., West Newbury, Mass.,	100.00
Texas Nursery Co., Sherman, Texas,	250.00
Thomas & Son, Jos. W., King-of-Prussia, Penna.,	25.00
Vanicek, V. A., Newport, Rhode Island,	100.00
Welch, E. S., Shenandoah, Iowa,	250.00
Weber & Sons Nursery Co., H. J., Nursery, Mo.,	50.00
Westover Nursery Co., Clayton, Miss.,	100.00
Westover Nursery Co., Clayton, Missouri,	50.00
Wohlert, A. E., Narberth, Penna.,	25.00
Wright, George B., Chelmsford, Mass.,	25.00

PROPAGATING HERBACEOUS PLANTS FROM ROOT CUTTINGS

Quite a number of herbaceous plants can be propagated by root cuttings and when they will propagate this way, it is the best method. It is quicker and better in every way than by top cuttings.

Japanese Anemones, *Phlox decussata* and *paniculata* varieties, *Statice*, *Anchusa*, *Centaurea montana*, *Clematis Davidiana*, *Papaver Orientale* varieties, *Passiflora incarnata*, *Plumbago Larpentae* and *Senecio pulcher*.

Dig the plants up and bring them indoors and when they are dry enough to handle, cut the roots up into inch lengths. It is just as well to keep them all one way so that they may be put in the sand the right end up, while this may not be essential with all kinds some of them, such as the Anemones, persist in making root fibers from the lower end of the roots and shoots, from the upper end and a more uniform lot of plants can be secured by following this practice.

These small pieces of root will often grow when planted right in the soil in small pots or flats, but a better result will be gotten by putting them in the cutting bench in sand to start them. Put them in rows in the sand just as you would top cuttings only of course completely burying them, the top of the cutting should be just under the sand. There will be little danger of their not growing, the main object is to get a good even stand so they can be handled quickly and economically.

MASSACHUSETTS NURSERYMEN'S ASSOCIATION

West Newbury, Mass., January 16, 1918.

The Massachusetts Nurserymen's Association held their annual meeting in Boston on Tuesday, January 8th, 1918, and the following officers were elected for the ensuing year:

President, John Kirkegaard.

Vice President, George C. Thurlow.

Secretary-Treasurer, Winthrop H. Thurlow.

Executive Committee—Julius Heurlin, Richard Wyman, Walter Adams, and E. W. Breed.

W. H. THURLOW, *Secretary*.

SEQUOIAS GIGANTEA

The famous Redwood and Bigwood trees of California are well known by reputation. So much has been written about them by visitors to the land of their birth, but horticultural information about them, outside of their own country, is not so general.

The nurseryman is often likely to be asked if it is not possible to grow them in the east or other parts of the United States. Many hundreds have been planted in different parts of the country east of the Rockies but it is doubtful if there is a single notable specimen, at least the writer has neither seen nor heard of one.

A number of specimens of the *Sequoia gigantea* under observation for the last 20 years would lead one to think they are practically a failure. One died several years ago of general debility, after attaining a height of about forty feet. Another one still alive about 25 feet high and a trunk 14 inches in diameter and about thirty years old with everything in its favor struggles along from year to year. Every summer it puts on new growth and looks well towards the fall but the winters are evidently almost too much for it. It turns brown and seems barely able to hold its own.

A great contrast to the vigor and rapid growth of this tree in England. It seems the extremes of heat and cold are too much for it in the Eastern states. Yet it is a tree of wonderful vitality which perhaps accounts in part for its existing through the ages in its native habitat.

A Nurseryman at the Front

*Copy of a letter received here from Private William Flemer, Jr.,
with Section—U. S. A. A. S., now in France.*

"Somewhere in France." November 21, 1917.

Your welcome letter of September 24th came quite a few days ago, having been six weeks on the way. Mail is quite a question here. Many letters never reach us at all and those that do are long in getting here. Perhaps things will be better when our new address is used.

At last we are down to our regular work and really it is very interesting and I could not imagine a nicer branch to be in. Some sections are connected with base hospitals in the large cities. Others are doing the evacuation work from the first aid stations to the dressing stations, and again back to permanent field and base hospitals. The latter is what we are doing. On the advance posts we can see and hear the shrapnel burst and can hear the patter of the machine guns at times. At night the star shells break and light up the surrounding country like an arc light. At present this is a quiet sector so we have not had any real action and so far no one has received a scratch. We are exposed only to barrage fire. At times we make several trips from the posts back to the hospitals. We evacuate five field dressing stations. Sometimes the twenty-four hour shift passes without a call. On clear days, which are few at this season, many aeroplanes can be seen and battles in the air are the main features. I have seen several and in nearly every case the gallant French aviators are victorious. A few of the "Boche" machines were brought down behind our lines and some of the boys have dandy souvenirs. It is great to see an encounter. They dart about like dragon flies and then the rattle of machine guns comes faintly down. If a cloud is near they maneuver for this cover, darting in and out until one gains the upper hand, and the other either falls or flees to the shelter of their territory.

At our posts we are sheltered in dug-outs far from any stray shell. Here in camp, which is about eight miles behind the trenches, we have wonderful quarters, and the eats—well they are the best since we left home. We have a great French chef inherited from the Red Cross Section, No. 24. I have been out to the posts several times. Our numbers have been decreased to thirty-five men. We have twenty cars and four trucks, all of which can be used in cases of necessity. Our trip from the seaport to the base camp and from there to our present location was made in the cars and we had a wonderful time. Imagine any other troops moving that way. The cities we passed through and other details will have to remain untold until we meet again for the censor would not pass upon it.

When we lost the ten men at the base camp, we also lost our American lieutenant. Don't let it worry you, for we are under the command of a Lieutenant from old Section 24 and he is a prince, thoroughly familiar with all the tricks and turns of the game. We also have a French Lieutenant, two mechanics, two Corporals and

one Sergeant, also the chef—all French and dandy fellows.

This detached service is certainly great stuff. Every four months we have ten days permission, the time extra needed to reach our destination and a return ticket to boot. Only six men can go at one time. The first lot left yesterday headed for Paris and Nice. I go with the second crowd and leave camp the early part of December. I will write when away and tell you about it.

Please remember me to all the dear folks way back in the good old U. S. A. and tell them I will write as often as possible. We won't let the old flag touch the ground.

Your sincere friend,

"BILL" FLEMER.

*If any of Mr. Flemer's nurseryman friends would like to write to him. His address is William Flemer, Jr.,
U. S. A. A. S. 24/523*

21 Rue Pinel

*B. C. III,
Paris, France.*

New York, January 18, 1918.

Dear Sir:—

It has been forcibly brought to my attention that in the last thirty days or more, the conservation of fuel would be brought about to a very large extent if the people throughout the country, particularly in the rural districts, could be educated to the more general use of wood for fuel.

It has not been so long since I was a lad and I lived on a farm and we used almost exclusively wood for fuel. The farmers in the fall used to cut down dead and partly dead trees and use the wood for fire wood. This I believe has been largely done away with, but at the same time we cannot cut down our forests without replacing them.

My idea in addressing you would be to see if you would take up with the proper authorities in Washington, the advocacy of planting forest trees and shade trees of all kinds and descriptions suitable to the different localities throughout the United States by the farmers and nurserymen this spring because there will no doubt be a tremendous cutting down of trees following the fuel shortage this winter and of people making preparation for next year's supply and unless something is done to replace them it will be eventually the lessening of our forest area.

This thought occurred to me and I would be glad if you would take it up to the proper authority for advocacy of a general planting proposition in the spring.

Yours truly,

F. B. VANDEGRIFT & COMPANY,
WILLIAM W. RICH, *President.*

Newark, New York, January 22, 1918.

Editor National Nurseryman,
Dear Sir:—

The above letter from Mr. W. W. Rich, President of F. B. Vandegrift & Co., New York, contains a suggestion of such importance that it should be brought to the attention not only of the officers of the American Association of Nurserymen but to the attention of every nurseryman in the country. As Mr. Rich says, we have an opportunity not only to encourage the saving of coal now by the use of wood whenever obtainable, but we can encourage the production of a fuel supply for coming years through the planting of forest trees. I think it was the late J. J. Hill who predicted years ago that we would in time build only stone houses because of the destruction of our forests without doing anything to replace them. The great weakness of our National thought is that it considers the present only; we have been wonderfully prosperous, not because of our superior initiative or efficiency but because of the wonderful opportunities we have had; as a Nation we have not acquired wealth; it has been thrust upon us. Unless we consider that posterity having done nothing for us, we are under no obligation to those who are to follow us, then we should use what we have in trust and pass it along to the next generation unimpaired. We are not doing that. We are rapidly destroying our timber and doing practically nothing to replace it. There is an idea in Mr. Rich's letter that should have the serious thought of every one of us; and it particularly affects the nurserymen who are responsible for producing the orchards and the forests of the future. We Americans put things off; we live altogether in todays when all tomorrows are full of moment. The railroad situation did not grow up in a day; the coal situation could have been avoided by timely action; the lack of an army on the Western line where it is so badly needed could have been supplied by beginning to raise it August 4, 1914. Can't we nurserymen do something now for the future's timber? I respectfully suggest that Mr. Rich's letter offers opportunity for prompt and effective action by a committee of the Association.

Yours truly,

JOHN WATSON.

We have enjoyed the issue of your paper sent us a few days ago very much. We think the National Nurseryman is getting better than it used to be. At least if the sample sent us is a fair average.

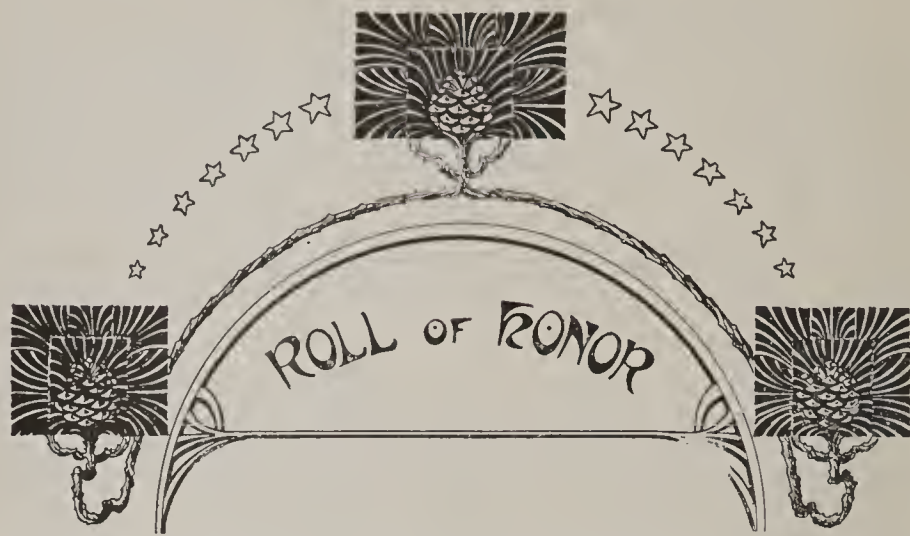
Very truly yours,

THE FARMER'S NURSERY CO.

Can any reader give the address of the manufacturers of tree brushes?

H. G. Monce Nurseries, Nampa, Idaho, has sold its nursery and moved to Nyssa, Oregon, to engage in fruit-growing.

F. Rynveld & Sons, 25 West Broadway, have removed their offices to 61 Vesey Street, New York, better and more commodious offices being needed for their increasing business.



IT is the purpose of the National Nurseryman to publish a roll of honor consisting of the names of those nurserymen serving in the United States army in the present war. We shall appreciate it if our readers will send us their names and photographs if possible.

Carroll A. Bagby, Capt. U. S. Infantry—New Haven Nurseries, New Haven, Mo.

Harold J. Bagby, Enlisted Medical Reserve Corps—New Haven Nurseries, New Haven, Mo.

Lew W. Bagby, Lieutenant (Junior Grade) U. S. Navy—New Haven Nurseries, New Haven, Mo. Toronto, Canada.

Oliver W. Bagby, Lieutenant, U. S. Navy—New Haven Nurseries, New Haven, Mo.

Ralph B. Bagby, Lieutenant, 21st U. S. F. A., Fort Riley, Kansas—New Haven Nurseries, New Haven, Mo.

Robert E. Bagby, Cadet, Senior Class, United States Military Academy—New Haven Nurseries, New Haven, Mo.

John H. Chattin, Aviation Section of the Signal Reserve Corps, San Antonio, Texas. Secretary and Treasurer of the Winchester Nursery Company, Winchester, Tenn.

William Flemer, Jr., Private U. S. Expeditionary Force, Ambulance Corps, Battalion No. 23, Section No. 23, France. F. & F. Nurseries, Springfield, N. J.

Edwin Hoyt, 1st Lieutenant of the Field Artillery, Officers Reserve Corps, now stationed at Camp Grant, Rockford, Ills.—The Stephen Hoyt's Sons Co., Inc., New Canaan, Conn.

Jackson & Perkins Co., of Newark, N. Y., have hung out a service flag with four stars in it. The stars represent: P. V. Fortmiller, Ordnance Department, Washington.

Loren G. Olmstead, Sergeant, Camp Gordon, Ga.

Clarence G. Perkins, Naval Radio School, Newport, R. I. Stuart Perkins, Chief Petty Officer, Naval Aeronautic Station, Miami, Fla.

Henry Edward Kelley, 1st Lieutenant, Company C, 165 Infantry, American Expeditionary Force, now in France.—The Stephen Hoyt's Sons Co., Inc., New Canaan, Conn.

Albert F. Meehan, Third Officers' Training Camp, Yaphank, L. I., N. Y. Member of firm Thomas B. Meehan Co., Dresher, Pa.

Wade Muldoon, Sergeant, Headquarters Military Police, Camp Hancock, Ga.—Thomas Meehan & Sons.

Paul Rathert, Battery F., 128th U. S. F. A., Ft. Sill, Oklahoma, New Haven Nurseries, New Haven, Mo.

Meredith P. Reed, Captain, Sixth Company Section U. S. Officers' Reserve Corps.—Vincennes Nurseries, Vincennes, Indiana.

Philip Rouse and Julian Rouse, nephews of the Smith

Brothers, now in the Navat Reserve, with headquarters at Jacksonville, Fla.

Charles Schwentker, Battery F, 128th U. S. F. A., Ft. Sill, Oklahoma—New Haven Nurseries, New Haven, Mo.

Charles R. Smith, Aviation Section of the Signal Reserve Corps, Aviation Camp, San Antonio, Texas.—Smith Bros. Nursery Company, Concord, Ga.

Lawton V. Smith, nephew of the Smith Brothers, of Concord Nurseries, of Concord, Ga., now a lieutenant in the Aviation Section of the Army, and stationed near

Clay M. Stark, Stark Bros. Nurseries & Orchards Co., Louisiana, Missouri. American Field Service. Now in France.

Lloyd C. Stark, Major of the Field Artillery, Fort Sill, Okla. Vice-President and a Director of Stark Bros. Nurseries and Orchards Co., Louisiana, Mo. President of the National Association of Nurseries.

George Taylor, Battery "F," 108th U. S. F. A., Camp Hancock, Georgia.—Thomas Meehan & Sons.

Stanley V. Wilcox, Co. E. 103rd Engineers, Camp Hancock, Augusta, Ga. Thomas Meehan & Sons, Germantown, Pa.

Robert J. McCarthy, Sergeant, 101st Machine Gun Battalion, American Expeditionary Force now in France.

Clarence J. Gattigan, 2nd Co., U. S. C. A., Fort Adams, R. I.

William P. Langdon, Third Officers Training Camp, Yaphank, N. Y.

OFFICE WORK FOR FEBRUARY

Anything that can be done now to relieve the pressure of work in spring is profitable. The winter months are slack ones in the nursery office as far as business is concerned, yet, if we think ahead a great deal can be done that will make things run smoothly and relieve the pressure when shipping commences.

The first thing necessary is perhaps to clean up and get rid of accumulations. Very few offices that will not accumulate all kinds of junk that ought to be done away with. One prime requisite is to have the stock books in shape so that you will know just what you have to sell. Too much information cannot be put upon them. It ought to be possible to know the quantity, grade, price, condition, etc., at a moment's notice when the inquiries and orders begin to come in, and such information being immediately available will save an immense amount of time when time is valuable. Supplementary information as to where stock can be secured quickly will also be found convenient.

It is quite a job to book every order as it is received, yet it is the only method that will keep things straight, and if systematically planned, it is very mechanical and may be attended to by an unskilled employee. There is nothing quite so aggravating as to sell or offer stock and after the order has been accepted and turned out for shipment to find out you do not have it. Every nursery has its own particular system, either by book, index cards or maybe the proprietor keeps the records in his head, trusting to his memory to keep things straight. If the latter, he will find a simple record on paper, attended to by his stenographer, will relieve him from much worry and give him more time to attend to things he cannot delegate to someone else.

If the past year's correspondence be looked over, it will

be surprising how much alike are the numerous inquiries that have been made, and this suggests the information be made quickly available if not in actual form letters, in such a way that it will not require an expert to answer the letters.

If it is a retail business, the queries will be many and various. What kind of fruit tree shall I plant? What would a shade tree cost? What would you suggest for a porch bed with a southern exposure? etc., etc. There is not the slightest reason why all these answers should not be prepared in advance, and prepared to fit the stock you have to offer.

The form letter has been pretty well worked to death, but it still has its uses when it is not too obviously a form, and there is no time like the winter months for planning them out.

Another important job is a check-up of supplies so as to have sufficient to last over the season, or know where they can be quickly procured. In these days of modern method, there are few businesses that do not have a card index of their customers and prospects, and winter is the time to thoroughly check them up, weeding out the "dead" ones, and putting them in shape for the coming spring.

THE SOUTHWESTERN ASSOCIATION OF NURSERYMEN IS ORGANIZED

THE Texas Nurserymen's Association automatically passed out of existence, when the Southwestern Association of Nurserymen's organization was formed. The new organization will cover the States of Arizona, New Mexico, Louisiana, Arkansas, Oklahoma and Texas.

The new organization was formed as the result of a committee being appointed at the Waco meeting of the Texas Nurserymen's Association last September, when it was definitely decided to form a new organization covering the entire Southwest instead of just Texas. The matter was taken up with prominent nurserymen and florists over the Southwest and sanctioned by them, which resulted in the forming of the new organization.

Many letters and telegrams were read from selected delegates over the States forming the new association, indorsing the movement and saying that on account of the busy season of the year many appointed delegates could not attend. The regular date of the association will be the fourth Tuesday in September, which is said to be a dull period for the nurserymen in the Southwest and when the next meeting is held here in September a hundred or more men are expected to attend from the States forming the new association.

J. R. Mayhew, Waxahachie, acted as chairman of the meeting, with J. W. Tackett of Fort Worth acting secretary.

A constitution and by-law committee consisting of M. Falkner, Waco; E. W. Kirkpatrick, McKinney, and W. A. Wagner, of Durant, was appointed and before the meeting adjourned presented a set of by-laws and a constitution that were later adopted.

A committee composed of C. C. Mayhew, Sherman; C. E. Stephens and W. B. Munson was named to nominate

officers and a place for the next regular meeting. The committee recommended Denison as the next meeting place and nominated officers all of whom were elected.

Telegrams were presented from Mayor Lawther of Dallas, and President Jackson, of the Dallas Chamber of Commerce asking that Dallas be named as the next meeting place, and also named as headquarters for the new organization. Forth Worth also made the same request through acting Secretary Tackett.

During the meeting Dr. J. E. Aubrey paid the nurserymen a visit, and was introduced by J. R. Mayhew, a life long friend of the pastor. Dr. Aubrey made a short and interesting talk to the visitors and made them all feel at home in Denison. Mr. Mayhew replied and spoke in the highest terms of Dr. Aubrey, saying he was a booster and very live citizen.

W. N. King, secretary of the Chamber of Commerce, was introduced to the visitors and issued an invitation for them to remain over in Denison and attend a luncheon in their honor. The nurserymen intended leaving the city and could not accept the invitation, however, they said the invitation would be deferred until September when the Chamber of Commerce could depend on them accepting the offer to a dinner or some sort of entertainment.

Acting Chairman Mayhew appointed the following committees to serve until the annual meeting in September:

Membership: Texas—J. S. Kerr, Sherman; W. C. Griffing, Port Arthur; G. F. Uerhalen, Scottsville. Oklahoma—Mr. Garee, Noble. Arkansas—George Parker, Fayetteville. Louisiana—A. K. Clingman. New Mexico and Arizona—W. H. Hatcher, Douglas, Arizona.

Resolution Committee—E. W. Kirkpatrick, McKinney; M. Falkner, Waco, and J. W. Tackett, Fort Worth.

Just before the meeting closed E. W. Kirkpatrick, a veteran nurseryman and highly respected citizen of Collin county, spoke on the subject of "The Nurseryman's Part in Winning the War." Among many items touched on by Mr. Kirkpatrick was the fact that nurserymen were in better position than any one in assisting the general public in the conservation of foods. The speaker pointed out the fact that the land must be prepared first, and then the crop planted and harvested properly. He said that nurserymen were in position to give advice freely on the proper cultivation of land, when and how to plant and when and how to harvest. He suggested that every man present give his ideas and suggestions to the newspapers and spread the information broadcast through publicity and help have a garden or fruit tree on every vacant lot and piece of land in the Nation.

"I came to Denison for my first trip in 1878 to attend an agricultural meeting and I have been attending such meetings once or more every year since. I am 73 years old and hope to live long enough to see every highway planted in fruit trees of some kind. Trees that bear fruit or nuts along the highways and furnish shade at the same time. There are sixty-five per cent of the homes in Texas without a fruit tree of some description. The nurserymen have given considerable already but they can give more. There are certain times of the season when trees of various description may be given to persons showing an inclination to plant and take care of them. Let's give them to such people. Let's give every

orphan's home, or a like school, trees to plant in their school yards. Let us pledge ourselves to do this and everything along this line to have plenty of fruit to take care of the foreign Nations whose fine fruit gardens have been destroyed by the war and they will have to call on us for supplies when this great conflict is over, and their demand will be for many years to come.

"In Germany they tell the people how to till the soil, when and how to plant, and the work must be done in this manner—that is the reason the German armies are holding out so well. Here it is different. I suggest less roses and shrubbery and more cabbage and vegetables of all descriptions for a period of the war at least. The fragrance of the roses is appreciated but the boys 'over there' can not eat roses, so we should all encourage the planting of foodstuff as far as possible and thereby help win the war." The speaker reviewed some of his life-work and made one of the most stirring talks ever heard in Denison.

Before adjourning, the association adopted a vote of thanks to the Chamber of Commerce, Denison Hotel, Denison Herald and the correspondent of the Associated Press for courtesies shown the organization, and every man present said he would attend the September meeting, when representatives from the States now forming the new organization would attend and transact much business of great importance to the new association.

Among those attending were: J. R. Mayhew, Waxahachie; E. W. Kirkpatrick, McKinney; M. G. Black, Mount Pleasant; G. F. Verhalen, Scottsville; M. Falkner, Waco; L. W. Thackett, Fort Worth; W. C. Esry and Harry McManis, Dallas; F. B. Foster, Denton; W. A. Wagoner, Durant; C. C. Mayhew, Sherman; A. S. Allen, Pottsboro; Will Munson, C. E. Stephens and A. D. Jackson, Denison.

The next meeting of the Southwestern Association of Nurserymen will be held in Denison, September 24, 1918.

The officers chosen at the initial meeting of the new organization held here are:

W. C. Griffing, Port Arthur, president.

W. A. Wagner, Durant, vice president.

L. J. Tackett, Fort Worth, secretary-treasurer.

J. R. Mayhew, Waxahachie; George Parker, Fayetteville, Arkansas, together with officers named, will constitute the executive committee.

NEW JERSEY ASSOCIATION OF NURSERYMEN

The annual meeting of the New Jersey Association of Nurserymen was held at Trenton, N. J., January 25, 1918.

The following officers were elected to serve for the ensuing year:

President, Carl H. Flemer, Springfield, N. J.

Vice President, Wm. DuBree, Plainfield, N. J.

Sec'y and Treas., A. F. Meisky, Elizabeth, N. J.

The association elected five new members at this meeting.

Mr. John Watson, of the Princeton Nursery Co., made an address on The Publicity Campaign of the nurserymen throughout the different states, and several of the members agreed to make a yearly contribution for the next five years to help raise the necessary funds.

A. F. MEISKY, *Sec'y.*

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by

THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in Nursery Stocks of all kinds. It circulates throughout the United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

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Six Months \$1.00

Advertising rates will be sent upon application. Advertisements should reach this office by the 20th of the month previous to the date of issue.

Payment in advance required for foreign advertisements. Drafts on New York or postal orders, instead of checks, are requested by the Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be addressed, Editor, Flourtown, Pa., and should be mailed to arrive not later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., February 1918

As to just what the conditions of business for the nurserymen will be, the coming spring, no one knows, and one man's guess is as good as another. No one has inside information and there is no precedent to guide us in forming an opinion.

We can, however, analyze the conditions as we know them and draw our own conclusions.

In looking over the field or market, it is not altogether discouraging at least not so much so as some would have us believe.

The farmers on the whole are prosperous and there is no reason at all why they should not be good buyers. Orchardists perhaps may be classed as doubtful, there are numerous reasons why new plantings will be limited, they may not be good ones, but the fact that most men are hesitating about spending money in new ventures will be the controlling one.

The planting on large country estates is sure to be restricted as building has largely come to a standstill and the source of income of the wealthy has been much disturbed, the same may be said of the better class of suburban residences, according to building reports it is not promising for much activity.

The planting of parks and cemeteries should be about normal.

Municipal plantings perhaps will be restricted as there is always a tendency to withhold appropriations for such work during unsettled conditions.

Factories are on the whole prosperous, and every effort should be made to encourage them to improve the surroundings, the same may be said of the small homes.

To summarize the market. It may not be an urgent one but there is still a big field for endeavor if the nursery-

man will rise to the occasion.

From all reports nursery stock will not be in surplus, labor shortage, reduced imports and a general curtailing of plantings have all had a tendency in reducing it so there is every reason to believe there will be as much demand as there will be stock to satisfy it.

The transportation problem has been viewed with misgiving by many nurserymen but it is foolish to worry before it is necessary. There is not likely to be any embargo on nursery stock, as the last thing the government wants to do is to interfere any more than possible with legitimate business.

THE ENTOMOLOGISTS AND NURSERY INSPECTORS WANT ALL IMPORTATIONS OF NURSERY STOCK PROHIBITED BECAUSE OF REAL OR IMAGINARY DANGERS THAT MIGHT RESULT BY INTRODUCING INSECTS OR DISEASE UPON IT. WHY STOP AT NURSERY STOCK?

Would it not be wise to have included in the proposed bill other materials that might act as vehicles? In fact, the safest plan would be to stop all communication with foreign countries, but alas and alack, there is no means of preventing the birds, winds, and wild animals from bringing the pests that may be lying in wait in Canada on the North and Mexico on the South, to ravage our fair land.

Then that fearful danger of interstate commerce. Who knows but there is some terrible pest lying dormant in the Rocky Mountains that will develop into a dreadful scourge when brought to a congenial host in lower altitudes. The mere transplanting of a plant from one part of the state to another may bring together the dual host necessary for overwhelming increase to some pernicious fungus. It is really dangerous to be alive.

It makes one shudder to think what may have happened to our vast forests, or the fruit growing industries and the farms before the entomologists were trained to watch over them. So the only way to prevent some dire calamity is to increase the number of inspectors and entomologists and reduce the number of nurserymen and horticulturists and maybe farmers, because even the latter grow things that are subject to disease, especially the amateur kind.

Of course, there is a common sense alternative, but it would require broad-minded entomologists, conscientious inspectors, well trained nurserymen and law-abiding importers each and every one to co-operate, with a view to getting intelligent results in combatting pests and diseases, but such methods would be too logical, natural and simple.

THE TRANSPORTATION PROBLEM

Nurserymen are still up in the air as to what conditions will govern the transportation of nursery stock the coming spring. In December they were beginning to congratulate themselves on the fact that nursery stock was to be classed with seeds and feeds in the priority order issued from Washington, thus having preferential shipment along with goods in the same class over all

other goods except fuel for the operation of railroads.

Since then the Government has taken over all the railroads and all priority orders have been cancelled until the traffic situation can be cleared up. There is every reason to believe there will not be any unjust discrimination against the transportation of nursery stock as a non-essential, as was feared last fall.

Mr. J. Horace McFarland writes that the suggestion made in *The National Nurseryman* for a Better Homes Exposition would, if well managed, be an exceedingly good thing for the country, as well as for the nursery trade. His opinion is that it is largely a question of how the exposition could be arranged and how interest in it could be stimulated. Given a workable plan he thinks success would be certain and great good just as certain.

It is noted another big scheme of National Advertising is just being undertaken by the Pacific Northwest Tourist Association. They are going to spend \$120,000 in the next two years advertising the Pacific Northwest as the playground of America.

It is time the nurserymen started something along this line, if they are to advertise their goods as they should be.

A circular letter has been sent out by Curtis Nye Smith, Secretary of the American Association of Nurserymen, calling for payment by members of the Association for balance of dues for 1918. Formerly the dues were paid annually, at convention time in June. At the last convention the time for payment of dues was changed to January 1st. Those who paid their dues last June still owe from June, 1918 to December, 1918, and are requested to remit half the amount they are accustomed to pay for the entire year, which will put them in good standing until January 1st, 1918.

The annual convention of florists, fruit growers, nurserymen and beekeepers is being held in Nashville, Tenn. January 29th to February 1st, inclusive.

The organizations have had joint meetings for several years and large numbers have been present and profitable programs have been rendered. This year they expect to have an unusually good program, in fact the best ever held by the organizations.

Headquarters are at the Hermitage Hotel, Nashville.

PENNSYLVANIA NURSERYMEN

The annual meeting of the Pennsylvania Nurserymen's Association was held, by arrangement and courtesy of Mr. J. Horace McFarland, in the rooms of the Harrisburg Club, Harrisburg, Pa., Tuesday, January 22nd.

A very enjoyable and satisfactory lunch was prepared for the members at noon, after which the association went into executive session where matters on legislation and kindred subjects were discussed.

A resolution was passed opposing the Week's bill, recently introduced in Congress, to prohibit the importation of nursery stock, and pledging the support of the Association to the Legislative Committee of the American Association.

The Association also was informed of the movement, which was started in New York early in January, to

create an organized campaign for Publicity, and a number of subscriptions were pledged.

The following officers were elected:

President—Adolph Muller, Norristown, Pa.

Vice President—J. H. Humphrey, Chestnut Hill, Pa.

Secretary—Henry T. Moon, Morrisville, Pa.

Treasurer—Thomas Rakestraw, Kennett Square, Pa.

EXECUTIVE COMMITTEE

Wilmer W. Hoopes

James Krewson

Charles Thomas

LEGISLATIVE COMMITTEE

William Warner Harper

Thomas B. Meehan

George Achelis

J. W. Root

Edward Thomas

B. F. Barr

Thomas Rakestraw



*Clarence Galligan, from Elm City Nursery Co.
Now 2nd Co. N. S. C. A., Fort Adams, R. I.*

PLANTS THAT ARE SELDOM IN SURPLUS

There is always danger of becoming overstocked with plants that can be easily propagated and raised, even if there is a good live demand. As soon as the demand becomes known, the farmer and pseudo-nurseryman puts in a crop and the first thing you know prices are depressed and the brush pile looms up.

Things that are more difficult to grow, requiring special treatment and skill in their production, are rarely in surplus and here lies the field for the sure enough nurserymen.

Whoever heard of an overstock of well-grown Rhodo-

dendrons hybrids, *Ilex crenata*, Box, *Azalea mollis*, *pon-tica* and the hardy evergreen sorts, *Osmanthus* or the choicer kinds of evergreens, shrubs or trees. If there is an overstock, it is because the particular nurseryman is unfortunately situated and cannot get them on the market through being too far removed from it.

LANDSCAPE ARCHITECTS AND NURSERYMEN GETTING TOGETHER

For some years it has been felt that there should be closer relations between the Landscape Architects and the Nurserymen. While each is pursuing his own line of work, one is more or less dependent upon the other. The Landscape Architect must have nursery stock, and through his work and efforts the nurseryman disposes of large quantities of material.

Over a year ago the Ornamental Growers Association, and the American Association of Nurserymen each appointed a committee to confer with a similar committee from the Society of American Landscape Architects. The Joint Committee held several meetings in New York, and accomplished a great deal, as will be seen by a perusal of the following report issued by the Ornamental Growers' Association.

The work of the Joint Committee is by no means completed, other meetings will follow until a satisfactory agreement on all points under discussion has been reached.

REPORT OF THE COMMITTEE ON RELATIONS WITH LANDSCAPE ARCHITECTS

Held in Office of Ferruccio Vitale, New York City, May 31, 1917.
authorized to be printed and distributed among the members of the Ornamental Growers' Association, at their mid-summer meeting in New York City.

The Conference was attended by the following Committee from the Society of American Landscape Architects on Relations with the Trade: Ferruccio Vitale, chairman, James L. Greenleaf, R. E. Wilcox.

Committee from the Ornamental Growers' Association on Relations with Landscape Architects: J. Edward Moon, chairman, Harlan P. Kelsey, Thomas B. Meehan, F. L. Atkins.

Committee from the American Association of Nurserymen on Relations with Landscape Architects: Windsor S. Wyman, chairman.

The Conference opened at 10 a. m. and continued, with the exception of a recess for luncheon, until 4.30 p. m. During this time numerous phases of the relation of nurserymen to landscape architects were taken up, and discussed at length in a friendly way, with the idea in mind of developing a code by which our business relations might be carried on more advantageously to all of the interests represented.

The conclusions tentatively reached by the Conference, and which it was decided to present to our representative organizations are set forth below. It is desired that all nurserymen shall read these carefully, consider them thoroughly, and then report their comments to the chairman of our committee, J. Edward Moon, of Morrisville, Pa. It is hoped that from these comments some conclusions may be reached and presented at a future joint Conference. Members will assist their committee very much by constructive comments, which will bring about the end which is very much sought by the nursery interests, as well as by the landscape architects.

PRICES

It seems that the consensus of opinion is that in so far as

landscape architects perform a service to the nurserymen as representatives both of the nurserymen and of the client, and also in selecting, distributing and properly using the materials grown in their nurseries, that they should obtain, solely for the benefit of their clients, a discount from prices that otherwise would be made direct to consumers.

It seems, also, that in order not to utilize such discounts as a means of soliciting work, this discount should not be so large that the ability to buy cheaply is a greater asset to the landscape architect than is his ability to design and construct properly. It was, therefore, decided at this meeting to recommend that the nurseries should not allow trade discounts, but that they make a reduction upon their prices to consumers.

In this respect a clear distinction was made between trade prices and wholesale prices.

Trade prices represent the prices made by one nurseryman to other recognized nurserymen.

Wholesale prices are prices to general buyers in proportion to the quantity of material purchased, and should always be higher than trade prices.

BILLS

"Bills rendered by nurserymen for planting materials supplied to clients of the landscape architect should be made out to the client direct, and rendered through the office of the landscape architect."

It was the opinion of the Conference that it should be recommended that all bills rendered by nurseries for planting materials supplied to clients by landscape architects should be made out to the client and rendered through the office of the landscape architects. Discounts, if any, should be shown on these bills.

COMMISSIONS

"Attitude of nurserymen toward superintendents and gardeners in regard to discounts given to them and not shown on bills."

"Discounts given to gardeners in cash for the placing of orders with the nurseries."

It seems to be the consensus of opinion that the associations represented at this Conference should endeavor to detect and eliminate where it occurs, the evil of allowing superintendents, private gardeners and whoever in power to order nursery materials for a third party, cash payment or other consideration, directly or indirectly, proportionate to the amount purchased.

It seems to be agreed that the effort required to obtain results along these lines will only be successful if all nurserymen, landscape architects, employers and others interested, do everything in their power to stop this custom entirely.

We recommend that a statement be prepared and recommended by our associations regarding the practice of giving direct commissions, or graft, to private gardeners, superintendents, or others who are in a position as trusted employees or agents; that this statement cite the legislations in different states intended to combat this evil; that gardeners, employees, and all others interested be shown the evil results that arise from this pernicious practice and that business houses, contractors, professional landscape architects, employers and employees alike be urged to co-operate in stamping out this insidious practice.

BIDDING

It seems to be the opinion that the prevailing custom of sending lists of plants for quotations is not satisfactory to any of the parties concerned, for the reason that prices are no criterion by which to judge nursery products, and it is the opinion that this system of competitive bidding should be eradicated as fast as possible, wherever not required by law.

It was mentioned that in several instances clients of the landscape architects send plans, planting lists and specifications, made for them by the landscape architects, to the trade in order to check the prices obtained by the landscape architect.

This represents a practice harmful to the prestige of the landscape architect and difficult for the nurserymen to handle.

In regard to bidding, it was stated that the value of personal

knowledge and selection in regard to nursery stock is thereby set aside, and the prices obtained represent the minimum for which inferior plants can be obtained. In order to eradicate this evil, it was suggested that the matter be discussed whenever possible with the memberships of the garden clubs and that it be recommended to the associations represented in this committee, that literature on the subject, as well as other subjects, that might arise, be circulated among the garden clubs.

GUARANTEE

It seems to be the consensus of opinion that if nurserymen are willing to sell nursery stock through landscape architects at a reduced price from the price charged to the consumer, no guarantee, expressed or implied, should be given as to the life of the stock after planting, and that the responsibility of the nurserymen should cease upon the delivery in good condition of stock to the transportation company; that if the clients insist on a guarantee, an insurance premium be charged for the stock, varying with the varieties and in accordance with the risk assumed.

The landscape architects are expected to represent to their clients that the guarantee of stock, when an insurance premium is charged for, is aleatory in nature, and presupposes thorough care of the stock on receipt and after planting.

The period covered by a guarantee is understood to be one year from date of invoice, and covers one replacement, only.

PROTECTION OF NURSERYMEN'S INTERESTS

It was stated that legally the liability of the nurserymen, as regards the condition of plants is concerned, ceases after the delivery of the stock to the transportation company; that very often such shipments are delayed or damaged in transit; that clients are apt then, to attempt to hold the nurserymen responsible for such damage.

When circumstances like these arise it is recommended that landscape architects use their influence with clients to protect the nurserymen's interests. It is suggested, also, that when stock is received that the bills of lading should be signed by the landscape architects, or their representatives, with a clause that will give redress to the railroad company for any damage that is sustained.

LANDSCAPE DESIGNING BY NURSERYMEN

It seems to be the consensus of opinion that nurserymen should not endeavor to design landscape improvements for private owners, unless they receive compensation therefor. That the prevailing practice of supplying plants for developments with the understanding that no charge will be made for such plans, if materials are bought from the nursery, is a practice to be discouraged.

This report is respectfully submitted by your committee, and in so doing, we once again urge the co-operation of the membership, who are desired to communicate with the chairman of the committee on Relations with Landscape Architects.

Respectfully submitted,

THE COMMITTEE ON RELATIONS
WITH LANDSCAPE ARCHITECTS.
J. EDWARD MOON, Chairman, Morrisville, Pa.
HARLAN P. KELSEY,
THOS. B. MEEHAN,
FREDERIC L. ATKINS.

RESOLUTIONS PASSED BY THE ORNAMENTAL
GROWERS' ASSOCIATION HELD AT HOTEL
BILTMORE, NEW YORK, N. Y.,
JANUARY 4th AND 5th, 1918

Whereas

the successful prosecution of the war in which our country is engaged will overtax our normal food production if we are to supply our people at home and our allies abroad, and

Whereas

thruout every state and section of the nation there are scores of millions of fruit trees of mature and bearing size and age that would bring within the reach and purchasing power of the most humble of our citizens, hundreds of millions of bushels of fruit in excess of the normal production during the season of 1918, without the entailment of great expense or the encumbering of our already crowded transportation facilities,

Therefore, be it resolved,

that we nurserymen in conference assembled tender our service gratuitously to the owners of fruit trees everywhere in the matter of instruction for the immediate rejuvenation of barren and under productive trees to make them fully productive. We urge the agricultural colleges and nurserymen everywhere to render this patriotic service whenever and wherever possible to increase the production of fruit as food from present orchards for the winning of America's war.

We respectfully suggest that the national and state food administrators include in all their propaganda for increased food production this agitation and admonition to spray, prune, cultivate, fertilize and otherwise so handle as to bring into full and immediate production all orchards and fruit trees of whatever kind or wherever located.

We respectfully suggest that this resolution be given wide and general dissemination by all food administrators, publications and other interests working for the winning of the war.

(Signed)

THOMAS B. MEEHAN, *Pres.*,
CHARLES J. MALOY, *Sec'y.*

TO WM. FLEMER, JR.

SERGEANT VERNON T. ROBINSON.

FRANCE.

The Ornamental Growers' Association in annual session assembled at the Biltmore Hotel, January 4th and 5th, send greetings and hearty good wishes.

Pres.—THOMAS B. MEEHAN.
Sec'y.—C. J. MALOY.

A MORE EFFECTIVE TRADE ORGANIZATION FOR THE AMERICAN ASSOCIATION OF NURSERYMEN

By J. R. Mayhew, Waxahachie, Texas. Read at the meeting of the Western Association of Nurserymen, Kansas City, Mo.

Mr. President and Members of the Western Association of Nurserymen:—

When asked by the chairman of your program committee to prepare a paper on the subject, a more effective trade organization for the American Association of Nurserymen, I suggested to him the possibility of tiring you out with continually speaking on this subject, and only through his insistence did I acquiesce. You will recall that a year ago I spoke on a similar subject before this Association, also before the American Association at Philadelphia, and while I am just as enthusiastically in favor of a more efficient organization for handling the affairs of

the National Association as I have been, I do not want to tire you or myself with its preachment. If I had had any doubts of the need of some such organization as will be finally considered at Chicago in June, the events of the past few months would have dispelled same, for the more I know of the nurserymen's problems, and each day brings new ones, the more definitely I conclude how impossible it is to meet those problems with our present organization.

Last August I received President Stark's resignation, and while, after consultation with the Executive Committee, it was determined that he continue as President during his term of office, I have, under the constitution, discharged the duties of the office as Vice-President since this date.

Under our present organization the President is chief executive, and I believe any man who has filled the office will agree with me when I say that no man with large affairs of his own can as efficiently as should be desired discharge the duties incumbent upon this office. Members of American Association of Nurserymen report a total business for year ending June, 1917, of approximately twelve to fifteen million dollars, which, because of conditions, was decidedly below normal. The combined investment of the membership aggregates a large amount in money and in service to this country, and such an organization as is now before the Association is to my mind broad enough in its possibilities to serve efficiently the interests this organization will represent.

I need not at this time speak in detail of the work this proposed organization would attempt, for before Association meeting and through the trade papers the matter has been presented in detail for the past two years, hence I am sure that each of us has a fairly correct knowledge of what will be attempted. I feel inclined rather to attempt to answer some questions that have come to me, not exactly in the form of criticism, but some honest questions that are pertinent and which deserve to be answered, and to show you how necessary it is at this particular time to meet some real business problems that each hour are becoming more acute. I have said before, and I repeat here, that if the plan proposed is not practical, or if any member has a better plan of organization, it is entirely in order to adopt it in lieu of the plan made the first order of business for our next annual meeting, but until some one offers something better, our policy as a national association will be to accept or reject the organization I have the honor of presenting, and acting upon an order of the Philadelphia convention, this will be the first order of business at Chicago next June. I shall, then, if you please, discuss three questions which, by the way, constitute the only criticism I can now recall, and leave to you to judge whether these questions are, after all, serious.

QUESTION NO. 1.

The resolution which provides for this contemplated organization directs the Executive Committee "to establish within some centrally located city which in their judgment best meets the needs, a general office for handling the affairs of the Association." Personally, I think this would be a capital thing to do, but someone has raised the question, "If this office is established in Chicago will the balance of the country prove loyal to the organiza-

tion?" This is question No. 1, and is worthy of consideration. I can speak for only one member, but for that member I can say that there is not a drop of sectional blood coursing through his veins, and if there were, he would let it out if the process bled him to death. I cannot imagine any man big enough to belong to the American Association of Nurserymen whose petty sectional prejudice would prove a serious obstacle in establishing general offices for the Association where the best interests of all would be served, and in speaking on this question before, I invited any man present to indicate if if this, in his opinion, would be a serious objection. Now, I can understand why one would reason that our general office should be centrally located. The matter of communication between members and the office should, as nearly as possible, be equalized. It takes decidedly more time to carry a letter from Texas to Boston than it would to St. Louis, Chicago, or Detroit, and it likewise costs more to send a telegram. Therefore, I think that this provision of the resolution is fair and just. Do not you? I do not think that the location of this office, unless manifestly unfair to a large majority of the members, would prove a bone of contention. Do you?

QUESTION NO. 2.

Referring again to resolution, the Executive Committee is directed, after establishing a central office, to "place in charge of said office the most capable man to be found, and preferably one who knows the needs of the nurserymen, who shall be Secretary-Manager." Everyone believes that this would prove a most salutary policy—"if a man can be found," and this is question No. 2. That can only be answered by trying the matter out. I have never doubted and do not now doubt but that when the committee has been directed to find the man, that one entirely capable of filling this important position will be found. To be sure, the man is not available until the job is ready. That is a matter we can determine when we get to it, and certainly not before.

QUESTION NO. 3.

"Will the membership live up to the spirit of fellowship and co-operation which is the ground work of the whole plan?" No, not all of them; yes, a large majority of them. I believe in my fellow-man. I believe in his manhood, in his honesty, in his continuous striving to get on higher ground. I understand his frailties because I am frail—I understand his selfishness because I am selfish—but I believe in him nevertheless, and I know that he is constantly striving to make this world a better place in which to live. If we were deterred from going forward in an organized way by the fear that all would not be true to the spirit of fellowship and co-operation, all progress would cease; society would be chaotic. In church, politics, society, everywhere, there are men and women untrue, men and women who do not live up to their obligations or opportunities, but because this is true we do not abandon these institutions. In the Church of Jesus Christ there are many communicants untrue to the vows taken, but regardless of this fact the church is the greatest factor for righteousness in the world to-day. Christ himself could not choose twelve men who were true—but who would think of the one who proved false when eleven were true.

Why can't we be optimists rather than pessimists!

When this question has come to me I have answered it with a question, "will you live up to the spirit of fellowship and co-operation embodied in this resolution," and every time the answer has been, "yes." Then, let us judge every other of the five hundred members in the American Association of Nurserymen by that particular member whom we know best, and let us look well to our own household. I therefore, unhesitatingly forecast the success of the proposed organization, first, because the plan has been adjudged a practical business organization by some of our best business minds, because no one has any criticism to offer on that score, and, furthermore, because I believe in the integrity and in the business acumen of men comprising the membership of the American Association of Nurserymen. To reach other conclusions one would be forced into the embarrassing position of debating the intelligence and integrity of fellow members, a thing I think none of us will do.

ASSOCIATION FUNDS AND ENERGIES IN THE PAST EXPENDED ALMOST EXCLUSIVELY ON LEGISLATIVE MATTERS.

A review of disbursements of Association funds prove conclusively that in the minds of our officers legislative matters have been paramount to all others, and as a result, such matters have been most efficiently looked after. With no thought of minimizing the importance of safeguarding the nursery interests from a legislative point of view, I think there are other questions which cannot longer be neglected without serious loss to the nurserymen. As everywhere else in business life, there are times that an attorney is needed, and I am glad to say that, in my opinion, the American Association of Nurserymen has one of the best in the country, but we are overlooking business problems and opportunities which we wrestle with three hundred and sixty-five days in the year, and take to bed with us at night.

A VERY REAL PROBLEM AT THIS HOUR IS TRANSPORTATION.

Take the question of transportation, for illustration, always a problem, but especially so at this date. What it would have been worth to the shippers of nursery stock to have had a competent traffic man located in some central city, to be sure, is conjecture, but from some work Mr. Sizemore has taken time from his duties with my business to render some of you. I am firmly of the opinion that had we had some such man, with time to look after matters of transportation, much of the delay and loss could have been avoided. To be sure, our present organization has not been idle here, and everything possible has been done to relieve the situation. The acting President and your efficient attorney have been in close touch with the situation at Washington, and promises have been made by government officials that the nurserymen's interests will, as far as possible, be safeguarded. What is needed in addition to what has already been done is a traffic man capable of locating delayed shipments, keeping in direct touch with freight movement and pushing freight through to destination. Promises are good, *but we need and must have results.* I am led to believe that the matter of transportation will continue to be a very serious problem during the immediate future at least, and I regret that there is so little that the present organization can do to relieve the situation. I am so thoroughly convinced of the shippers' needs in the matter of transportation, believing that each hour becomes more critical, that if the condition of our

treasury warranted, I would ask the Executive Committee to put a traffic man at work in an endeavor to move the shipment of winter and spring orders. This, to-day, is our real problem. If congestion continues through the spring season, I dare not think of the enormity of the nurserymen's losses. Stock, destination March 1st, which arrives March 15th, or April 1st, will be worth as much as the ashes from last year's bonfire. One of my friends said to me a few days since that he was that day unloading three cars of stock ordered out last October, much of which was seriously damaged by having gone through the freezes of the winter, and all of which was ordered for last fall orders. The government officials in this matter of transportation, as well as everywhere else, are confronted with greater problems than ever before in the history of this country. They are, beyond doubt, exceedingly anxious to keep industrial wheels moving, and will most gladly make us any reasonable promise, but regardless of *priority classification*, if our stock does not move we will go broke. Right now a transportation man staying on the job every minute of the day would, in my opinion, make the Association a more effective trade organization.

PUBLICITY

Some of our friends in other trade organizations think we are a great joke in the matter of publicity, but one of these days they will wake up and find that we move slowly, but eventually get there. When word goes out from Chicago next June that the American Association of Nurserymen has voted to establish a business office to take over the management of the affairs of the Association, it will prove the biggest publicity boost the nursery interests ever received, and, by the way, we will never get very far in the matter of publicity until we are in position to plan and execute a publicity program from a central office. Think of the tax on one's time necessary to study intelligently the question of publicity and then consider the arduous duties every day brings to each of us, and it is no surprise that our publicity committees are able to accomplish so little. The question of publicity for American nurserymen is big enough to command the time of an expert, and such an organization as we are considering should make ample provision to inaugurate and maintain a publicity campaign along broadest possible lines. A publicity campaign, adequately financed and intelligently executed, would add tremendously to our yearly income and would make the Association a more effective trade organization, and less than such an effort would be a waste of effort and money. When we are ready to expend intelligently the money subscribed to a publicity fund, I am personally ready to subscribe every dollar I am able, and until we are ready I think we should wait.

PURCHASING SUPPLIES

The members of American Association of Nurserymen spend approximately a quarter of a million dollars annually for supplies, practically all of which are purchased individually, and the great bulk of which is shipped across the continent local freight. From the information I have been able to gather, I am of the opinion that a purchasing agent under the direction of our proposed general office, buying for the entire membership, could save, conservatively, 5% on our annual supply bill, which, loaded car load to distributing point within a

given territory, would deliver supplies to every member at a minimum cost. I am convinced that this is entirely practical, and I would expect to see a saving of \$12,000.00 to \$15,000.00 effected during the first year of the inauguration of this plan of buying. This would certainly go to make a more effective trade organization.

OUR IDEAL 100% EFFICIENT.

Walking down my street a few days after the nation's successful Red Cross membership drive, I was interested in noting the cross of patriotism appearing in the prominent door or window of every home and business house along the street and the words, "100% patriotic," and I thought, "if old Bill Kaiser could see this evidence of patriotism it would cause a shiver to play up and down his backbone." This is an hour in the history of our beloved America when patriotism demands that business be 100% efficient. Less than our very best is unworthy of us at all times, but less than our best to-day would be treason. The challenge which comes to each of us to-day is to make our business contribute to the nation's weal 100% in patriotic service.

We can scarcely bring our minds to compass the dire necessity of maximum production in all lines of food, as this question is presented by our leaders, for America has always been a land of plenty. In the fall of 1914 the wise ones told us that it was only a question of a few months until the Imperial German Government would be starved into submission, and that has been more than three years ago. Shut in from the outside world, it was only a question of a few months until her food supply would be exhausted. James W. Gerard, in his book, "My Four Years in Germany," makes this astounding and, I judge, dependable statement: "There is far greater danger of the starvation of our Allies than the starvation of the Germans. Every available inch of ground in Germany is cultivated, and cultivated by the aid of old men, the boys, and the women, and the two million prisoners of war. The arable lands of northern France and of Roumania are being cultivated by the German army with an efficiency never before known in these countries, and most of that food will be added to the food supply of Germany. Certainly the people will suffer; but still more certainly this war will not be ended because of the starvation of Germany." I do not know how that statement from our Ambassador to Germany impresses you, but to me it is a call to service on the part of America in behalf of our Allies, such as should cause us to redouble our efforts in food production, and your products are as certainly *food products* as wheat, corn, meat, and all the rest. I have not the heart to speak to you to-day concerning your pecuniary interests, for we, as a nation, are to-day vastly more interested in giving than we are in getting. The business of the nation at this hour is not commerce, for the first time in the lives of most of us,—the business of the nation is war, and war on the most gigantic scale ever dreamed of.

The transportation lines of the nation are needed and, by executive order, billions of property and millions of men are commandeered, while the most cosmopolitan nation on the face of the earth looks on with approval. A hundred million free people, boastful of individual rights and privileges, are directed to observe "meatless Tuesday and wheatless Wednesday," and because of pure patriotism such days are religiously observed by all. The

boast of our civilization has been and is our industries. We have built here in free America the most gigantic industrial enterprises on the face of the earth, giving employment to millions of workers, turning out finished products worth daily many millions of dollars. It has been said by experts in the industrial world that to shut down the industries of the nation for a day would paralyze commerce and throw the nation into panic, but how little the experts know of the real facts. The engines of commerce, through executive order, are commanded to stand still for five consecutive days, that cargoes of food, supplies, ammunition and men may move across the waters. Bowing to the mandate of the government, the doors of thousands of places of business are closed as if by magic, and the only note of disapproval comes from the politician—the people bow in humble submission. The business of the nation is war.

Think of the sacrifice the people representing both capital and labor are making to-day, of the many thousands of the nation's brainiest and busiest men who have turned their backs on home and on pecuniary interests, with their faces toward the flag, and meditate upon the incredible, immeasurable, unimaginable power of patriotism. I know the heart of the nurserymen of America and I know that I speak for all of them when I say that all we have and all that we are is to-day at the command of our government. We stand ready to do our part, even to the dedication of our fortunes and our lives on the altar of our country. You have only to call the roll to prove my words. Our beloved President, Lloyd C. Stark, set a worthy example and correctly interpreted the attitude of the nurserymen of America when he voluntarily gave up the comforts of home and the emoluments of business, choosing rather the arduous duties of army life at the call of his country, and many of your sons have followed in his footsteps. Many of us by reason of age or infirmity will not be called to the front. Few of us will be called into service to sit in council with our leaders, but there is a service each of us can and will render. The home fires must be kept burning, and this, my friends, is the patriotic service you and I must render. One would be simple minded indeed who could view the future with equanimity. We have problems to-day such as we have not had in the years gone by, and each day adds new ones. No man's opinion concerning the future would be worth recording. We know not what any hour may bring forth.

Costs, labor, transportation are but the beginning of the enumeration, and our problems are aggravated because our commodity is perishable. I tell you candidly that you cannot make money under these conditions, few of us, perhaps, expect to, and I tell you just as candidly that if the nursery business lives through these trying times, and it certainly has a right to live, we should be satisfied.

We must live close together. I think of a word here that expresses my thought—close-banded. We must band our interests, our problems, we must forget for the time being, at least, much of individualism. Acting as a unit, we must send a message to the world concerning ourselves about which the world knows not; that ours is one of necessary business enterprises of the nation. That any serious interference in the movement of nursery products means a curtailment in food products, the one thing

which the government says will be disastrous. In the accomplishment of all this, I believe a way is provided in the resolution now before the American Association. If that resolution and the accompanying amendment to the constitution had been adopted at Philadelphia last June, there are many things your officers could now be doing that they are powerless to do because of a lack of funds.

After speaking on this subject before the Southern Association of Nurserymen last August, a resolution was passed by this bunch of live nurserymen unanimously endorsing the plans now before the National Association, and urging the Chicago convention to take favorable action thereon. I believe, Mr. President, that the adoption of proposed resolution and amendments by the American Association will not only make the Association a more efficient trade organization, but will make it one of the strongest trade organizations in the United States, and I am confident this will be accomplished at Chicago next June.

REMINISCENCES OF A PIONEER NURSERYMAN

BORN in humble surroundings of honest parents, in the village of Sutton, Isle of Ely, Cambridge County, England. I came to Illinois in February, 1859, started my life-chosen business on seven acres of land in Brookside, Downs-Clinton Co., adjoining the young city of Centralia South on the county line of Marion and Clinton.

Having some knowledge of budding, grafting and propagating which I had picked up from a neighbor practical gardener in my native village, when I landed in Illinois, with a young ambitious wife, I aimed to get a piece of land of my own and try to make an honest living for us, either truck gardening or nursery. I started in by purchasing seven acres and in a little three room cottage went to work and expanded as I was able, being blessed with good health and a strong body. We added to our seven acres lying east of our little home and adjoining Ill. C. R. R. We worked long hours budding sixty-five thousand peach trees the first year, 1866, when peach trees were in great demand at \$75.00 per 1000.

In 1867 we issued our first little catalogue. We had strawberry plants, the old Wilson Abby for sale and Osage Orange hedge plants when they were in great demand at \$2.50 per M.

With land on both sides of Ill. C. R. R. and in 1871 we put up a large elaborate sign board that could be seen from the passing trains.

Needing more room as the business expanded, we got permission to grow rhubarb and hedge plants on the Ill. C. R. R. right of way. This when cleared of its wild growth, gave us at least three more acres of land. Later we bought another 40 acres on the east side of the railroad, and then 16 acres upon which we grew soy beans and cow peas and rye to plow under to make up for the lack of stable manure we could not get.

Pie plant was one of our staple crops and this we grew by the acre. In 1884 we carried a great variety of shade, evergreens and deciduous flowering shrubbery. We employed lots of labor and worked 14 to 15 hours a day, did our own root grafting in the winter months. Built an up-ground hollow wall tree cellar that would

store several carloads of trees. One winter we lost thirty-five thousand peach trees we had grown. A severe spell of weather, 22 degrees below zero killed them. Another winter rabbits ruined a fine block of apple trees.

My brother William with his little son had come from England after losing his wife. My brother, a strong, healthy man in the prime of life succumbed to typhoid fever. I had his boy to raise and educate. He is today living in Centralia with his wife and one grown son.

The proprietors of Webster's Greenhouses on South Locust street, and the owner of two or three small farms. I always loved trees and admired the beautiful things in nature.

I raised asparagus and strawberries in large quantities. Seven or eight acres of small fruits as we had to grow those crops which we could dispose of readily, although we had a greater variety of trees, shrubbery and evergreens than any other man had attempted to grow in Southern Illinois up to that time.

I sold out to my son, C. H. Webster, who later disposed of the property to a real estate man and today the Illin-



Jabez Webster

A pioneer nurseryman of Southern Illinois

ois Central Railroad shops and yards occupy the most of Webster's Nursery. There is now nothing to show of my years of labor except the old house and trees I planted by moonlight in 1865.

The same amount of labor, energy and brains applied along other lines, than the nursery business, would have been more likely to have amassed a fortune. As it is I have a fairly good home, a modest income, which perhaps is all a man needs in his old age, and for which I am duly thankful.

Conifers at the Arnold Arboretum

The climate of New England is usually considered unfavorable to the successful cultivation of conifers. As compared with New Zealand, northern Italy, Ireland, and the region adjacent to Puget Sound, New England is certainly a poor country for these trees. There are worse regions for conifers, however, like some of the middle western states and Texas, and two of the handsomest trees of this class in the world grow at their best in New England, the White Pine, *Pinus Strobus*, and the Hemlock, *Tsuga canadensis*. No region need be poor in conifers where these two trees flourish. The conifers of Europe do not find congenial conditions here, although those from the northern and central parts of the continent like the Norway Spruce, and the Scotch, Austrian and Swiss Pines, are hardy although generally short-lived. The Himalayan species, with the exception of *Pinus excelsa* which is never satisfactory here, are not hardy. None of the conifers of Mexico or South America, Australia or Tasmania, can be grown in the northern states in which the species of southern China and Japan are not hardy. Unfortunately very few of the conifers of western North America succeed in the eastern states, as these are the noblest of the trees of this class. The exceptions are the western White Pine, *Pinus monticola*, a tree which bears a general resemblance to our eastern White Pine and which is distributed from the sea-level on Vancouver Island up to high altitudes on the California Sierra Nevada and the mountains of Idaho. The Sugar Pine of the California Sierras, *Pinus Lambertiana*, the greatest of all Pine trees, gives little promise here of ever becoming a large or valuable tree. This is also true of Jeffrey's Pine, *Pinus ponderosa* var. *Jeffreyi*, which can be seen in its greatest beauty on the eastern slopes of the Sierra Nevada. The western Mountain Hemlock, *Tsuga Mertensiana*, or as it is often called *Pattoniana*, *Abies amabilis*, the lovely Fir of the Cascade Range, the Incense Cedar of the Sierra Nevada, *Libocedrus decurrens*, and the Fir of the northwest coast, *Abies grandis*, and the Red Cedar, *Thuja plicata* or *gigantea*, are hardy in sheltered positions in the Arboretum but do not promise to be very long-lived here or to add much permanent beauty to our plantations. All the conifers of the northeastern part of this continent are, of course, hardy here but, with the exception of the White Pine, the Hemlock, the Red or Norway Pine, *Pinus resinosa*, the White Spruce, *Picea canadensis*, the Arbor Vitae, *Thuja occidentalis*, the Red Cedar, *Juniperus virginiana*, and the Larch, *Larix americana*, none of these are of much ornamental value.

On the slopes of the Blue Ridge in South Carolina, about the headwaters of the Savannah River, there is a conifer which seems destined to play an important part in the decoration of our northern parks and gardens. This is the so-called Carolina Hemlock, *Tsuga caroliniana*, which although a smaller tree than our northern Hem-

lock is even more graceful in the droop of its slender branches. This is a tree from which much can be expected. It is very hardy in the Arboretum where it has been growing for thirty years. The largest specimen in the collection will be found in the rear of the Laurels by the side of a walk along the northern base of Hemlock Hill. There are also a number of specimens in the mixed plantation of conifers near the corner of Centre and Walter Streets.

All the conifers of the Rocky Mountains are hardy in the Arboretum. The most promising of them are the Douglas Spruce, *Pseudotsuga mucronata*, and the Engelmann Spruce, *Picea Engelmannii*. The Douglas Spruce is one of the great trees of the world; it grows to an enormous size; it produces valuable timber, the Oregon Pine of commerce, and it is widely distributed from the shore of the Pacific Ocean over nearly all the mountain ranges of the west as far east as Colorado. A valuable lesson has been learned from this tree. For individuals raised from seeds gathered near the Pacific coast had not been hardy in New England, while plants from Colorado seed are perfectly hardy here, grow rapidly, and promise to become useful ornamental and timber trees. This experience with the Douglas Spruce shows in a striking manner the importance of a careful selection of the seeds of trees, and that in the case of widely distributed trees, like many conifers, the seeds should be gathered from regions most similar in climate to the region where the trees raised from the seeds are to grow. Such careful selection of seeds has been too generally neglected. When, however, its importance is understood it is possible that the area over which many trees can be successfully cultivated will be greatly extended.

Engelmann's Spruce in Colorado forms pure forests up to altitudes of 11,000 or 12,000 feet and ranges north into Alberta. It is a narrow pyramidal tree with gray-green foliage and cinnamon-red bark. It is too soon to speak of the value of this tree as a permanent addition to our plantations for it is only fifty years since it was discovered. The trees in the Pinetum of the Arboretum, which are believed to be the best in cultivation, are thirty-two years old. The Colorado White Fir, *Abies concolor*, is a fast-growing and hardy tree which of all the silver Firs appears to be best suited to New England. There are a number of specimens in the Pinetum about thirty years old but, like other silver Firs, they will probably grow less attractive as they grow older. The California form of *Abies concolor*, the *Abies Lowiana* of some collections, is hardy here but is a less desirable tree in this climate than the Colorado form. The best known of the Colorado conifers is the so-called Blue Spruce, the *Picea pungens* of most collections. This has been largely propagated in European and American nurseries and very generally planted. As this tree grows in Colorado, where it is not common, it becomes long before it attains its full size

thin, ragged and unsightly. In cultivation the young plants are handsome and symmetrical, but as the cultivated plants grow older they lose their lower branches and much of their beauty, and it is probable that this tree will not much longer retain its popularity. The Rocky Mountain form of the western Yellow Pine, *Pinus ponderosa* var. *scopulorum*, and the Rocky Mountain White Pine, *Pinus flexilis*, can be seen in the Pinetum but these are trees which grow slowly and probably will never be large or important trees in this climate.

The conifers of central and northern Japan usually do well in New England although only time can tell whether they will ever reach old age here. One of the Silver Firs, *Abies brachyphylla*, grows particularly well in the Arboretum and, next to *Abies concolor*, is one of the most promising of the Silver Firs which have been planted in New England. The other Japanese Firs are hardy here but none of them seem likely to attain any great size or age. Several of the Japanese Spruces grow well, and of *Picea Alcockiana*, *Picea bicolor*, and *Picea Glenhii*, better specimens can be seen in New England than in Europe.

The Japanese Arbor Vitae, *Thuja Standishii*, is not a large tree but it is perfectly at home in the Arboretum, as is the curious Umbrella Pine, *Sciadopitys verticillata*, and the Mountain Hemlock, *Tsuga diversifolia*. The true Pines of Japan, *Pinus Thunbergii*, *Pinus densiflora*, the eastern Asiatic representative of the so-called Scotch Pine of Europe and Siberia, *Pinus parviflora* and *Pinus pentaphylla*, are all well established in the Arboretum and produce cones here every year. The different forms of *Retinispora*, or *Chamaecyparis*, can also be seen in the Arboretum where there is a large collection of these plants; they sometimes suffer from our dry summers.

Of the continental conifers of eastern Asia the most interesting in the Arboretum are the Korean and Manchurian White Pine, *Pinus koraiensis*, one of the most valuable timber trees of eastern Asia, and the curious Lacebark Pine of China, *Pinus Bungeana*. This is a tree often shrubby in habit with thin foliage and chiefly remarkable for the snow-white color of the trunk and branches of old trees, a condition which none of the specimens in this country are yet old enough to show.

Two conifers from the Balkan Mountains are hardy in the Arboretum and produce their cones annually. These are a Spruce, *Picea omorika*, and a White Pine, *Pinus peuke*. *Picea omorika*, although it forms great forests on the mountains of southeastern Europe, has been known for a few years only to botanists and some of the oldest plants in cultivation are in the Arboretum where they form narrow, rather compact pyramids and, growing rapidly, promise to be valuable ornamental trees. Its nearest relative is the Spruce of the northwest coast, *Picea sitchensis*, which is not hardy here.

Of the Firs of southeastern Europe and Asia Minor *Abies cilicica* and *Abies cephalonica* are perhaps of the most promise in this climate where they are perfectly hardy. The former is a native of the Cilician Taurus where it grows at a high elevation above the sea-level with the Cedar of Lebanon, here in its most northern and coldest station. A few years ago the Arboretum was fortunate in securing the seeds of the Cedar from this region and the trees raised from these seeds are now well established and promise to be successful here, while plants

of this tree derived from Palestine have proved unable to bear the New England climate.

The important conifers of the Caucasus, *Abies Nordmanniana* and *Picea orientalis*, are hardy here and the latter is a valuable ornamental tree not unlike in general appearance the Red Spruce, *Picea rubra*, of northeastern North America which grows very slowly and does not take kindly to cultivation. The Spruce, *Picea Schrenkiana*, which covers with a stunted forest the dry slopes of the mountains of central Asia, is hardy and healthy in the Arboretum, but it will probably never become an important ornamental tree. A more desirable tree here is the Spruce of central Siberia, *Picea obovata*, which is well established in the Arboretum where it already produces its cones.

All the Larches now known, with the exception of the Himalayan species, are growing in the Arboretum, including an interesting hybrid between the European and the Japanese species lately produced in Scotland. As an ornamental tree the eastern North American *Larix americana* is the most picturesque of all the Larches. The Japanese *Larix Kaempferi* or *leptolepis* grows the most rapidly. The largest of the genus is the western American *Larix occidentalis*, and the least known are *Larix chinensis* and *Larix Potanini*. *Larix siberica* from eastern Siberia and the Altai and *Larix dahurica* from eastern Siberia are still little known in this country. The Larches are at the western end of the Pinetum just above the Walter Street entrance. Near them is a group of Larch-like trees, *Pseudolarix Kaempferi*, a Chinese tree with the deciduous leaves of a true Larch and erect cones which fall apart when ripe like those of the Cedars. This interesting, beautiful and hardy tree which for many years was only known in temple gardens, has now been found growing abundantly on the mountains near Ningpo in southern China.

It is impossible in these brief notes to do more than briefly mention the most important conifers in the Arboretum, where there are now growing all the species with their numerous varieties which it is possible to keep alive here. The world has been pretty thoroughly explored for coniferous plants and the only place left where new trees of this class are likely to occur is western China. On the high mountains which form the Chinese-Tibetan boundary in addition to Firs, Hemlocks and Larches there appear to be more species of Spruce than in all the rest of the world. Seeds of all, or nearly all, of these trees have been obtained by the Arboretum, and the seedlings raised from them are now growing here and, through the agency of the Arboretum, in several American and European gardens.

The Taxus Family, Taxaceae, is now usually separated from the Coniferae although the Yews and their allies are generally spoken of as conifers. The most important of this group is, of course, *Ginkgo biloba*, the last survivor of an ancient race once widespread over the northern hemisphere and now known only from the plants cultivated in Chinese and Japanese gardens and their descendants. This tree is very hardy; it grows rapidly; it lives to a great age; and at maturity becomes very picturesque with its wide-spreading and drooping branches. It should be planted in this country more generally than it

has been for it readily adapts itself to the severe climate of New England.

One of the most interesting genera in this Family is *Torreya*, or as it is sometimes called *Tumion*, named in honor of a Nestor of North American botanists, and it is fortunate that its Japanese representative, *Torreya nucifera*, one of the handsomest evergreen trees in Japan, is hardy in this climate. A group of these plants is growing among the Laurels at the base of Hemlock Hill. The type of this genus, *Terreya taxifolia*, is a native of western Florida and one of the rarest of North American trees. There is a plant of this species near the top of Hemlock Hill where in a very sheltered position it has been growing for a number of years with several other conifers of doubtful hardiness.

The European Yew, *Taxus baccata*, is generally not hardy in New England, although there are a few varieties of this tree growing in the Arboretum. It is fortunate, therefore, that the Japanese and Chinese Yew, *Taxus cuspidata*, is entirely hardy here. The foliage of this tree is rather lighter in color than that of the European Yew; it grows more rapidly, and there appears no reason why it should not reach a large size and attain a great age in this country. There is a semiprostrate form with darker-colored leaves and long and semierect branches which spread into large masses. This is the variety *brevifolia* of American gardens. Of all the contributions, and they are many and important, which Japan has made to the gardens of New England these Yews are probably the most valuable.

THE AMERICAN PAPAW AND ITS FOOD VALUE

C. F. Langworthy, Chief, Office of Home Economics,
United States Department of Agriculture, and
A. D. Holmes, Scientific Assistant.

The name papaw (sometimes written pawpaw) is applied to two distinctly different fruits, both grown in the United States—one the native American papaw (*Asimina triloba*) and the other the fruit of the tropical American tree papaya (*Carica papaya*).

The papaw (*A. triloba*) varies in size from a bush to a medium-sized tree and usually bears fruit abundantly. From early times in this country the fruit has been gathered and used as food, the European settlers apparently learning its use from the Indians. Wherever it grows its use as food is well known, especially in rural regions, and is a favorite with many. It is little known, however, outside of the regions in which it is found wild, very likely because the flesh is very soft and easily bruised, especially when fully ripe. The fruit, which matures about the middle of September, remains in good condition only a short time after it is picked and does not stand either transportation or storage well. This difficulty is increased by the fact that many do not consider it edible until it is dead ripe; some even prefer it after it has begun to turn blackish in color and others maintain that a frost is required to bring the papaw to perfection. As a result of these preferences it is ordinarily eaten from the tree and is not found in quantity in the markets, even in the regions in which it grows.

Writers appear to differ as to whether the skin of the papaw should be eaten in conjunction with the pulp or

not, some maintaining that the skin possesses constituents which cause urticaria, while others pronounce it both palatable and wholesome. According to Corbett, it is more usual to eat the skin with the pulp than to discard it.

Nature of fruit. The papaw has much in common with the custard apple, being a member of the same family. In appearance the mature fruit is practically cylindrical, with both ends rounded, the length being two or three times its diameter. The stem is attached, not at the end on the line of the long axis of the fruit, but a little to one side of the end, so the fruit hangs almost horizontal rather than perpendicular. The size of the fruit varies considerably with the localities in which it grows, the largest and best-developed specimens coming from the damp lowlands of the Mississippi Valley. A good-sized papaw will weigh three-fourths of a pound or sometimes a pound, though most of them are smaller, particularly when they grow clustered on the branches. The fruit contains a double row of shiny black seeds, which are arranged at right angles to its axis and occupy a very considerable portion of the interior of the fruit. Surrounding the seeds is a creamy pulp having a smooth texture and a rather pungent aroma, which, as the fruit ripens, is replaced by an ethereal flavor, for which the papaw is especially esteemed by its admirers. In appearance the papaw resembles the banana more than any other common fruit, though the pulp has a different texture and the fruit is smaller than the varieties of bananas commonly seen in this country. The papaw is very generally eaten in the localities in which it grows, but out of hand rather than as a recognized part of the diet, differing in this respect from such wild fruits as berries. Although some may not care for its peculiar flavor, its wholesomeness has been proved by long experience, children being especially fond of it and often eating it in quantity without harmful results.

Historical data. Little states that "the settlers in southern Kansas partly subsisted on pecan nuts and papaws" when their crops had failed, and in regard to the use of papaws he says: "It makes a splendid custard pie. There is no finer desert than papaw eaten with cream and sugar. It is used to make beer the same as the persimmon by putting the fruit in a jar, mashing it, and putting water on and letting it stand until fermented. It also answers to make pudding just the same as persimmon pudding is made. It is also said that brandy equal to peach brandy is made of papaws. Marmalade which is equal to that made of pears or peaches may be made of papaws. The custard [pulp] may be spread on a board and dried like pumpkin leather. Papaws may be kept in their natural state till midwinter or longer by laying them down in oats."

The papaw is well worth a little more attention from the nurseryman, not only because of its food values but as an ornamental tree.

It is hardy as far north as Massachusetts along the seaboard but unfortunately is not easy to transplant successfully. It is about on a par with *Magnotia conspicua* in this respect.

It is propagated by seed sown in the fall or stratified and sown in the spring.

There is little doubt that a nurseryman raising good stock would readily dispose of them if properly advertised.



From the U.S.D. of A.

DAILY MARKET NEWS BULLETIN

Representatives of the United States Department of Agriculture after conference at the Office of the Director General of Railroads were informed that the Director General has not promulgated a list of non-essential farm products which will be denied transportation facilities and does not contemplate issuing any such order.

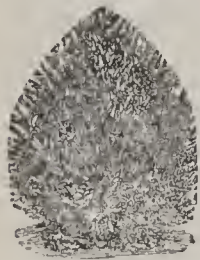
The Director General believes that under the plan now being formulated it will be possible to provide adequate transportation for farm products this year. Farmers should place orders for cars when needed with local freight agents as has always been the practice.

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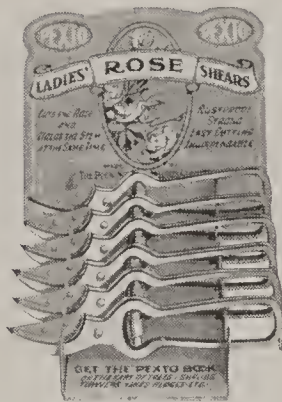
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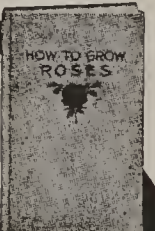
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MARCH 1918

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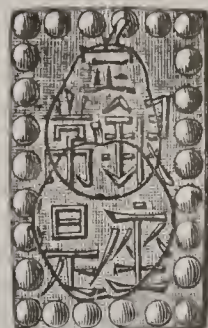
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FRUIT TREES
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Let's get together.



The D. HILL Nursery Co., Inc.
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A Fine Block of Own Root Roses

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Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY
GENEVA, N. Y.

70 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE

THE

North-Eastern Forestry Co.

CESHIRE
...Connecticut...

We have the following list of shade and ornamental trees, transplanted unless otherwise noted. Send in your list of wants for special prices.

300 Ash	.....8	-10	250 Honey Locust	4	- 5
3,000 "	.....6	- 8	200 "	"	5 - 6
3,000 "	.....5	- 6	100 "	"	1 1/4- 1 1/2
7,000 Boxelder	....4	- 5	100 "	"	1 1/2- 2
9,000 "	.....5	- 6	SOFT MAPLE		
10,000 "	.....6	- 8	20,000 Sdg.....	3	-4
200 "	.....8	-10	30,000 " & Trnspt.	4	-5
4000 Catalpa Speciosa	..4-5		3,000	5	-6
3,000 "	.....5-6		2,000	6	-8
3,000 "	.....6-8		400	1 1/4-1 1/2	
400 "	.....1 1/4-1 1/2		300	1 1/2-2	
5,000 Elm	.....5	- 6	300	2	-2 1/2
3,000 "	.....6	- 8	200	2 1/2-3	
1,000 "	.....8	-10	MULBERRY		
3,500 "	.....1 1/4- 1 1/2		4,000	12-17	Sdg.
3,000 "	.....1 1/2- 2		700	3- 4	"
700 "	.....2	- 2 1/2	Poplar—Carolina & Norway		
4,000 Hackberry	3	- 4 ft.	2,000	8	-10
3,000 "	4	- 5	2,000	1 1/2- 2 in.	
4,000 "	5	- 6	WALNUT—BLACK		
1,000 "	6	- 8	2,000	4- 5	
500 "	8	-10	8,000	5- 6	
375 "	1 1/4- 1 1/2		2,000	6- 8	
350 "	1 1/2- 2		100	8-10	
350 "	2	- 2 1/2	SEEDS		
350 "	2 1/2- 3		Russian Olive		
100 "	3-4 in. Cal.		Ash Seed		

Gurney Seed & Nursery Co.

YANKTON, SOUTH DAKOTA

J. H. Skinner & Co.

Topeka, - Kansas

Apple Seedlings

Mahaleb Seedlings

Forest Tree Seedlings—Catalpa, Elm, Maple, Mulberry, Black Locust and Honey Locust.

Fruit Trees—Apple, Cherry and Kieffer Pear. Rhubarb, Divided Roots, True Myatt's Linneaus.

Grapes

Shade Trees

Flowering Shrubs

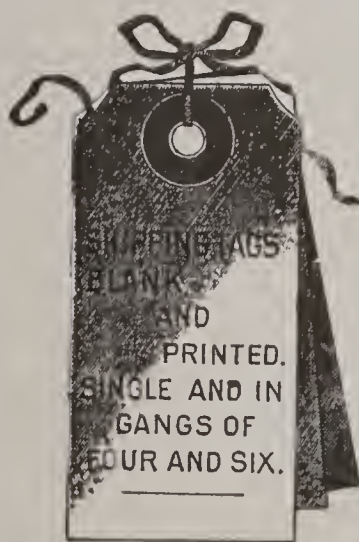
Paconias.

HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

Rawhide Brand of Shipping
Tags and Tree Labels

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.

West Chester, Pennsylvania

DO YOU NEED

SPIRAEA ANTHONY WATERER 2 to 2½ ft., and 2½ to 3 ft., bushy.

SPIRAEA THUNBERGII 2 to 2½ ft., and 2½ to 3 ft., bushy.

LONICERA TATARICA, red, white and pink 2 to 3 ft., and 3 to 4 ft.

HYDRANGEA PAN. GLAND. 2 to 3 ft., and 3 to 4 ft.

PERSIAN LILAC 2 to 3 ft., and 3 to 4 ft.

PHILADELPHUS GRANDIFLORUS, CORONARIUS and LEM-OINEI 2 to 3 ft., and 3 to 4 ft.

VIBURNUM PLICATUM 3 to 4 ft., and 4 to 5 ft.

WEIGELA ROSEA 4 to 5 ft.

SNOWBALL, Common 2 to 3 ft., and 3 to 4 ft.

HIGH-BUSH CRANBERRY 2 to 3 ft., and 3 to 4 ft.

Or any other shrubs. Send us a list of what you require, giving quantities and sizes, and let us quote you. It will be worth while. We have the stock.

SMALL STOCK FOR PLANTING IN NURSERY ROWS. We have it. The best ever. Did you get our price list? A postal card request will bring it to your office. Stock selling fast. Supply limited. Don't put it off and be disappointed.

Thomas B. Meehan Co.,
WHOLESALE NURSEYMEN

Dresher, - Penna.

Subscribers to "Nurserymen's Fund for Market Development."

STOCKS TO SPARE---

Out of our own importations, we
can spare a few

Pears 7-12 m-m

Plum 5-9 m-m

Manetti 5-10 m-m

on hand; immediate shipment;
F.O.B. prices. If interested, write:

John Watson & Company
NEWARK - NEW YORK
WAYNE COUNTY

MARCH FIRST

For Spring of 1918

*WE will have our usual line
of Ornamentals, Shade
Trees, Perennials, Apple,
Plum, Cherry, Peach, etc.*

C. M. Hobbs & Sons

Marion County

Bridgeport, - - Indiana

Subscribers to "Nurserymen's Fund for Market Development."

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa

Subscribers to "Nurserymen's Fund for Market Development."

LOOK FOR IT

The first of this month we issued our general wholesale trade list. Did you get your copy?

If not, a postal will bring one to your desk. There are lots of interesting offerings in this list and every nursery buyer should have a copy at hand; 24 full pages pricing complete assortment for you to choose your shorts and wants from.

Write today if you cannot locate your copy.

SHENANDOAH NURSERIES

D. S. LAKE, Pres.

SHENANDOAH, IOWA

Subscribers to "Nurserymen's Fund for Market Development."

SPECIAL—For Early 1918 Spring Shipment

No. 1. Berry Transplants.

Teas Wpg. Mulberry—4½ to 7 ft.—2 yr. heads.

Buddleya—Butterfly Bush, 2 to 4 ft.—at a bargain.

Spireas—Anthony Waterer, Van Houtte, 1½ to 4 ft.

Hydrangeas—Tree (4 ft.) Arborescens (Hills of Snow) Bush 2-4 ft.

Weigelas—Eva Rathka Rosea, Var. Candida, 2 to 4 ft.

Wick Hathaway Potato—Best Yields, Eater, Looker, Keeper.

SMALL FRUIT PLANTS

Current, Gooseberry, Grape Vines, Blackberry, Raspberry, Strawberry, of leading best kinds, including **FALL BEARERS.**

Your Want List will receive prompt attention—You never Delivered finer stock, nor received quicker service than you get from

Yours Truly

Wick Hathaway's Berry Plant Nursery

Madison,



The Best In Nursery Products

We carry a full line of fruit and ornamental trees, evergreens, shrubs, etc. Send us a list of your wants.

A FEW SPECIALS

Oriental Planes from 1¼ to 3 inch caliper. A large stock of Sugar Maples, American Elms, Beech grafted River's, and Fern-leaved, Double Flowering Japan Cherries, Prunus Pissardi, Flowering Apples, Flowering Peaches, Magnolia Tripetela, Japan and American Judas, Japan Walnuts, American Arbor Vitae, Hemlock and Norway Spruce, Altheas, Forsythias, Philadelphus, Viburnum Plicatum, Weigela, Eva Rathke, etc.

Downing Gooseberries, 2 years No. 1.

HOOPE'S BRO. & THOMAS COMPANY

THE WEST CHESTER NURSERIES

Established 1853 West Chester, Pa. Incorporated 1907

Subscribers to "Nurserymen's Fund for Market Development."



BERRY'S Wholesale Nursery

Small fruit plants in variety; rhubarb; horseradish; California Privet; Barberry Thunbergii; Hydrangea P. G.; Spiraea Van Houghti; Peonies, etc.

See list before placing your order.



P. D. BERRY

Dayton

Ohio

FRAMINGHAM QUALITY NURSERY STOCK

for

YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Our spring trade list is ready. Have you a copy?

If you have not reserved your share of Framingham Quality stock, act now.

Framingham Nurseries
FRAMINGHAM
MASS.

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

REMEMBER!

If its a hardy perennial or so called old fashion flower worth growing, we have it in one shape and another the year round. We have the largest stock in this country, all Made in America, and our prices—

Why say more here. Send for our Wholesale price list of varieties and benefit from the opportunities this affords you.

Our motto: "Maximum Quality, Minimum Cost."

Address, R. W. Clucas, Mgr.
Palisades Nurseries, Inc. Sparkill, N. Y.

Vincennes Nurseries, W. C. REED, Prop.
VINCENNES, - - INDIANA

Prepare for Spring by securing the best Cherry to be found. Our blocks of Cherry are the largest in the U. S. and quality the best. While the U Boats have been sending Mahalebs to the bottom the past two years, we have been fortunate in securing our usual supply and will have a splendid lot of trees to offer in the following:

CHERRY TWO YEAR general list of varieties

CHERRY ONE YEAR 11-16 up Sweets and Sours

PEACH ONE YEAR leading varieties

PLUM Japans, European and Hansen Hybrids

COMPASS Cherry and Apricots

APPLE leading varieties in connection with other stock only

Grafted English Walnuts and Northern Pecans

Special prices to car lot buyers on large orders

Subscribers to "Nurserymen's Fund for Market Development."

We are now ready to quote lowest prices on
FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries
Sparta, Ky.

For FUMIGATION With
HYDROCYANIC ACID GAS
"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by

The Roessler & Hasslacher Chemical Co.
100 William St. - - New York, N. Y.

You can save **Time and Money**

If you use our neatly packed

SHEET NURSERY BURLAP

Put up in bales

In various size sheets ranging in sizes from 24x24 to 40x40 in.

Write for particulars

Sarachan & Rosenthal
64-66 Hanover Street
Rochester, - - New York

Mahaleb Stocks

We are the most extensive growers of Mahaleb Stocks in the United States. Our Stocks are all grown from Imported Seed, and go out properly graded, packed, and in excellent condition.

A limited supply in 2-4 and 4-6 m m yet unsold.

Sample and prices on request.

COOPER & ROGERS

WINFIELD

KANSAS

THE WESTMINSTER NURSERY

J. E. Stoner, Prop.

WESTMINSTER

MARYLAND

The kind that give satisfaction

200,000 CALIFORNIA PRIVET, 1 year and 2 year

1/2 million ASPARAGUS, 2 year and 3 year

DOWNING GOOSEBERRY PLANTS, 2 year

BARBERRY THUNBERGI, 2 and 3 year transplanted

Can supply the above stock in car load lots or less, also, have a large stock of Rhubarb, Cumberland Raspberry Plants, Spireas, Deutzia Assorted, nice specimen plants. Evergreens, Horse Chestnut, N. Maple, Lombardy Poplar and Planes, etc.

We will make attractive low prices for early orders
Send List of Wants

WOOD LABELS

For Nurserymen and Florists

The kind that give satisfaction

Facilities for the handling of your requisite, combined with the quality of our product is unsurpassed.

Samples and prices are at the command of a communication from you.

Dayton Fruit Tree Label Co.
South Canal St., Dayton, Ohio

Forest Tree Nurseries

Pine Spruce

Evergreen trees for forest planting in any quantity, from 100 trees to carload lots. Every tree grown from seed in our own nursery.

Small trees for lining out.

Write us for price list.

Keene Forestry Association

KEENE - - - N. H.

A Pruning Book That Will Build Business for You



Here is a book that will help you by helping your customers.

It is a practical guide to right pruning and growing. It will tell every purchaser of your products how, when and where to prune for the most vigorous and healthy growth.

Knowing the kind of shears to get is equally as important as knowing how to use them. This book will give your customers some helpful information about shears too.

We'll Send You a Copy Free

We have a plan of co-operative selling and advertising of which "The Little Pruning Book" is an important part. It's a plan that will help you sell Nursery Stock and help us sell Pexto Pruning Shears.

You must see the book before you can appreciate the plan. It sells in book-stores for 50 cts., and believe us "It's worth sending for." Furthermore, sending for it does not obligate you in the slightest. It just gives us an opportunity to tell you about our business building plan. Send for your free copy today.

The Peck, Stow & Wilcox Co.

2189 W. Third Street
Cleveland, Ohio



PRUNING SHEARS

FAIRFIELD NURSERIES

FRUIT AND SEED FARMS

OFFER for Spring 1918

GRAPE VINES—One and two years old. Varieties largely Moore's Early, Concord and Niagara.

Also Scarlet or Crimson Clover Seed and Cow Peas. Free from weed seeds, all cleaned and guaranteed first class.

Correspondence solicited. Price list upon request.

CHAS. M. PETERS

P. O. Address, Salisbury, Wicomico County, Md., R. F. D. 3
Long Distance Phone and Telegraph, Salisbury, Md.

Forest Tree Seedlings

and

Ornamental Shrubs

We offer for spring 1918 our usual line of Forest tree seedlings and Ornamental Shrubs, Cuttings, etc. Write for spring trade list.

FOREST NURSERY COMPANY

McMinnville - - Tennessee

P. OUWERKERK,

No. 216 Jane St., Weehawken Heights, Hoboken, N. J.

Rhododendrons, Clematis, H. P. Roses, Hardy Azaleas, Paeonies, Magnolias, Box Trees, Fancy Conifers, Hydrangeas and Shrubs, our specialties at our HOLLAND NURSERIES. Some of the goods on hand here during the packing season.

CHERRY TREES

By car lots or lots of 1000, ready for spring shipment. Best varieties fine quality, 4 to 6 feet. Satisfaction Guaranteed. Also apples of all leading varieties 1 and 2 years old.

Strawberries, fine varieties.

Write for prices.

LIVINGSTON CO. NURSERY CO.
CHILLICOTHE - - - MO.

PRINTING

Catalogues
Stationery
Business Forms



The Robinson
Publishing Co.
Hatboro, Pa.

Specialists in Nursery Printing
Ask for Prices. We are the printers of this Magazine

WANT TO BUY SEEDS

Wish to communicate with dealers in
Hardy Tree and Shrubbery Seeds
Evergreen Seeds in Varieties.
Catalogues and Quotations Appreciated.

ERNST MECKLENBURG,
GLENVIEW, - - ILLINOIS.

WE OFFER

300,000 Apple Grafts--
Made from No. 1
straight roots.

All the leading var-
ieties.

500,000 Apple Stocks
Perfect condition.

20,000 Japan Pear
stocks $\frac{1}{4}$ inch.

30,000 Mahaleb No. 1
American grown. No
charge for packing and
boxing.

Condition guaranteed.



The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated

Vol. XXVI.

HATBORO, PENN. MARCH, 1918

No. 3

LAWN SPECIMENS

IN our last issue we figured the Weeping Beech. In direct contrast in style of growth is the present subject, Maidenhair Tree, Ginkgo, *Salisburia adiantifolia* as it is variously called. From observations of this tree for the last twenty years, the writer is perhaps in-

clined to appear a little over partial, but if so it is not without reason for no tree seems to have quite so many good points for use as a lawn specimen.

The first thing that strikes even the casual observer is its distinctiveness. There is no other tree like it, either



A handsome specimen of the Ginkgo, Salisburia adiantifolia. This tree always looks well near buildings.

in leaf or branching habit, and no tree harmonizes better with the lines of a building. The color is also good and what is more it is a clean tree, usually shedding all its leaves in one day after the first severe frost. The light frosts turn them golden yellow and a heavy one brings them all down, they don't blow about. The only objection is the fruit of the pistillate forms that is rather unpleasant when near the house. Apart from this it is ideal for planting near the house where a tree is wanted, that will give shade for windows or porch without shutting off the breeze.

In the right situation it is decidedly fast growing and although soft it does not seem to get storm broken and one rarely sees a dead branch or decaying cavities.

It attains magnificent proportions that will compare favorably with sugar or red maple. While young it is of slender habit not unlike the Lombardy Poplar, but as it matures it takes on a more spreading habit as seen in our illustration. The style of growth is however very uncertain and one of its charms as a lawn specimen, a perfectly columnar specimen is just as likely as not to send out a branch at right angles to the trunk, while all the others follow the leader.

It seems to be adaptable over a very wide area, thriving from Canada to North Carolina in situations that suit it.

So far the writer has yet to come across a tree infected with disease or insects, it seems particularly immune. The bark is very tender and easily bruised, so needs extra care in packing.

Botanically the Ginkgo is very interesting, it will be noticed the leaves are parallel veined instead of net-veined like most other deciduous trees. It is really a left over of a very numerous tribe that used to inhabit the earth in geologic time and is more nearly related to the evergreen cone bearing trees than with such trees as the maple and oaks.

If I am not mistaken it is nowhere found growing wild in the Orient from whence it comes but is supposed to have been preserved from prehistoric times in the temple gardens of China and Japan.

RIVALRY BETWEEN CATALOG NURSERYMEN AND THOSE RUNNING AGENTS

By Charles A. Green, Rochester, N. Y.

I have just received a letter from one of the largest nursery companies in this country therefore in the entire world, expressing its opinion that the up-to-date mail order concerns are as much a benefit to the nurseries that run agents as those that run agents are helpful to catalog men.

The thought desired to be expressed by this veteran nursery company, in which I fully concur, is that the firms sending out catalogs, often in marvelous quantities each season, create an interest in nursery products and secure a certain number of orders, but the field is not cleared up by this issue of catalogs. There is a vast residue resulting from this large issue illustrating what tree planting can accomplish, which brings no revenue to the firm issuing catalogs, but simply builds up a desire for

planting our products to be supplied by the tree agent who follows the path of the catalog later.

Likewise the thought is that that agent through his eloquence and his colored plates may create a desire for planting in the individuals on whom he personally calls, which may accrue to the benefit of the catalog nurserymen later.

Why then should there be such bitter rivalry between the two methods of selling nursery stock.

Recently I went into a shoe store and asked the proprietor where a certain other shoe store was located, from which I desired to purchase a pair of shoes. This gentleman courteously pointed out with great exactness and solicitude the location of the rival store. This pleased me so far that I bought the shoes where I was. After he had done up the package I remarked that it was something unusual in my experience to hear rival stores pointing out the location of their competitor. His reply was: "Such things would not have been done years ago but now business has changed its methods."

Yesterday I went into a carpet store to make a purchase. On explaining to the salesman what I wanted he said I would find the article at another store across the street. My eyes were opened again by this act to the fact that business methods have changed and are changing and that the business world is learning that there is room for all and that petty jealousies and bitter rivalries are things of the past in well conducted houses.

AMERICAN ASSOCIATION OF NURSERYMEN

The Executive Committee of the American Association of Nurserymen had a meeting at Kansas City, January 23rd and 24th, 1918, to consider various matters of interest to the Association.

Those present were, Vice and Acting-President J. R. Mayhew; Committeemen J. Edward Moon, C. C. Mayhew, T. B. West, E. S. Welch, and Secretary Curtis Nye Smith.

The Vice President stated that the principal thing to be considered was the serious question of transportation.

The Association Counsel, Curtis Nye Smith, gave a synopsis of what had been done to secure the release from embargoes of nursery stock, and he submitted a suggestion which might facilitate the work, namely: that a questionnaire be sent to members to obtain data as to the time of shipment of nursery stock, tonnage, and the direction in which the shipments would move, also the territories in, or into which the stock would move.

Mr. Smith also suggested that it might be of great help to the Association and to the trade if a War Service Committee was appointed, which could represent the Association in any of these war emergencies.

The Committee requested Mr. Smith to carry on the work of securing exemptions from embargo and appointed a War Service Committee consisting of Mr. Orlando Harrison, Berlin, Md., Chairman; Mr. John Dayton, Painesville, Ohio; and Mr. William P. Stark, of Neosho, Missouri.

The Secretary was also directed to send the questionnaire to certain representative nurserymen.

The question of a traffic agent to take care of the many difficulties that might arise in the forthcoming shipping

season was discussed, but it was found impossible to provide the necessary funds for such expense.

A budget covering the expenses of the Association was considered and adopted.

The scheme of the Nurserymen's Organization for Market Development by means of voluntary subscriptions was explained to the committee and, while the Committee did not feel it appropriate at the present time to take any action, it expressed an approval of the efforts being made by such organization.

The Committee on Hail Insurance submitted a report as to the offer of the American Mutual Cyclone and Hail Insurance Company, of Muncie, Ind., in the matter of protection from hail. It was voted not to accept the report of the Hail Committee not to accept the offer.

In the matter of the appointment of a Chairman of the Legislative Committee, Mr. William Pitkin having resigned such position, in as much as Mr. Pitkin was willing to act as Vice-Chairman and in charge of the opposition to the exclusion of foreign grown nursery stocks, and as counsel had consented to take care of the other work, it was decided not to appoint a Chairman until after the next annual convention of the Association.

The discussion of the plan of publication of a directory of those entitled to receive wholesale prices was considered, and action deferred.

Several other matters were also discussed at the meeting.

CONSERVATION

E. N. Reasoner, of the Royal Palm Nurseries, Oneco, Florida, calls attention to the very considerable economic waste continually going on in the nursery trade. He refers to the regular sending of northern nursery trade lists to Florida firms. Most of these lists are for nothing but hardy stock that it is not possible to use in Florida and other sub-tropical localities. Northern fruits cannot successfully be grown in the land of bananas and oranges any more than the latter can be grown up north.

There is no question but that a great saving could be made by carefully going over the mailing lists, keeping this fact in mind, we are apt to overlook the fact that the United States is an extremely large country, having a very varied climate.

TREE PLANTING DURING THE CIVIL WAR

Charles A. Green

During the Civil War in this country the southern armies were expected by many people to overrun the north, therefore there was a cessation of tree planting or of the planting of orchards of apples, peaches, plums and cherries, which caused distress among nurserymen. At the close of the war or soon after there was great scarcity of nursery products and fruit trees sold readily at \$1.00 each. One veteran nurseryman tells me that he sold many apple trees at one thousand dollars per thousand trees, which could be purchased now at \$350 per 1000.

Tacoma, Washington, January 4, 1917.

Editor National Nurseryman, Flourtown, Pa.

Dear Sir:—

We have just received copy of your nursery magazine, the first one that we have seen. We are very much interested in the promotion and publicity campaign for nurserymen, as we believe that the nurserymen have greater opportunities and make less use of them than any other business that we know of. We have been endeavoring to do some individual promotion work here in our own city, with a view of awakening the Tacoma people to the assets which they possess in the way of climate and scenery, and of making Tacoma one of the great tourist centers in the world. This would include of course the beautifying of the city—making the city cleaner, more sightly and better in every way. We have made some progress and can see where almost unlimited possibilities crop out. It makes us distressed to find that the other nurserymen can not also see these opportunities, or at least make little or no effort to utilize these great opportunities. In writing to some of the leading nursery firms and seed houses in this section we receive such replies as "We know it ought to be done, but we can't see how to go about it." And when we tell them about what we have done they ask "Has it paid?" It hasn't paid us because we have not as yet been able to carry our ideas out in full, but the more we work on the plan the more convinced we are that it is the only practical solution of the problem of how to create a demand and market for our nursery stock. We are also doing this single-handed whereas if we had the co-operation and support of the nurserymen's associations our task would be much easier. Our Pacific Coast Nurserymen's Association appointed a publicity committee at its meeting last June and they promised to keep us advised of what progress they made, and as we have not heard anything from them it looks as though no progress has been made up to this time. However, we have faith that ultimately we will develop some "Captains of Industry" in the nursery as well as other lines of business, and meanwhile all we can do is to do the best we can. It is discouraging to say the least to see many of the nurserymen going into bankruptcy while the rest of us are hanging on the ragged edge while all around us are unlimited opportunities only waiting to be utilized to bring prosperity to the nursery business.

There is no business that can secure the support of the newspapers, the commercial organizations, the school and park boards, the school children, women's clubs, parent-teachers' associations and other organizations that the nursery business can, and in face of all this the nurserymen are struggling along in the same old rut making little or no effort to change their methods—methods which they surely by this time must see will have to be abandoned or else the nursery business will prove a failure for the great majority of the nurserymen.

Hoping that the new year will bring about a change for the better, we remain,

Yours very truly,

MITCHELL NURSERY COMPANY,
M. G. MITCHELL, Sec'y.

A National Call to Service

By J. R. Mayhew, Waxahachie, Texas, Before the Tennessee State Nurserymen's Association, Nashville, Tennessee, January 29—February 1.

OUT of the depths of the great unknown today there comes a call so clear, so imperative, as if the voice of God were calling us to service. He must have a calloused soul who can pass through times like these and not hear a voice, whose call a man must answer or lose his soul.

I have not the heart to speak to you today concerning your pecuniary interests, for this is an hour in the history of our beloved country when true men and women are most earnestly asking the question, where can I invest what I have and what I am in a way that will contribute the largest possible service to my country. Today the question which most concerns us is not profits, is not partisan politics and emoluments of office, is not self and selfish interests. The question which concerns the vast majority of American citizens today is, where can I serve best. In a day we have been changed as in the twinkling of an eye. From a nation bordering on the materialistic, we are today the most altruistic people on earth. Why this change? A few months ago our beloved President led the people out upon the heights of Pisgah, and with prophetic finger pointed out the path of duty. He made this call so clear, so unselfish, so patriotic, that not only this nation but the civilized world rallied to his standard. Men upon whose shoulders rested the largest enterprises of the nation caught the vision of a world in need, and like the prophet of old, cried, "Here am I, send me." "Look at these thousands of men," a recent writer cries, "every man with his back to his home and his face toward the flag, and meditate upon the incredible, immeasurable, unimaginable power of patriotism." The story of sacrifice of men and women in all walks of life in this hour of the nation's need is unparalleled in the nation's history, and makes us glad that we are Americans. For the first time in the lives of most of us, we see our beloved land, a land which, for more than a hundred years, has been the haven of rest for the oppressed of every land, in a life and death struggle for those principles which are dearer to us than life itself. And we are coming more and more to a realization of what this war means—of the enormity of it. We are as children wakened out of a pleasant sleep, and when we are at last awake, when we see this thing in all of its hideousness, we will stand appalled.

In the fall of 1914, the wise ones told us it was only a question of a few months until the Imperial German Government would be starved into submission,—and that was more than three years ago. Shut in from the outside world, it was only a question of a few months until her food supply would be exhausted. James W. Gerard, in his book, "My Four Years in Germany," makes this astounding and, I judge, dependable statement: "There is far greater danger of starvation of the Allies than of starvation of the Germans. Every available inch of ground in Germany is cultivated, and cultivated by the

old men and boys, the women, and the two million prisoners of war. The arable lands of northern France and Rumania are being cultivated by the German army with an efficiency never before known in these countries, and most of that food will be added to the food supply of Germany. Certainly the people will suffer, but still more certainly this war will not be ended because of the starvation of Germany." I do not know how this statement from our Ambassador to Germany impresses you, but to me it is a call to service on the part of America in behalf of our Allies, such as should cause us to redouble our efforts in food production.

We are not at war with the millions of cultured and refined German and Austrian peoples, we are in a life and death struggle with the most conscienceless, the most remorseless, the most ruthless, the most powerful war machine that the minds of men trained for a hundred years in war could invent; and because of their education, training, and preparedness, the odds are against us. In the face of this tremendous task, our plight of unpreparedness a year ago was pitiable, and your duty and mine today is not to criticize but to remember that our business through all these years has not been in preparing for war, but in following the avocations of peace. We are a people educated and trained in peace. I know I but speak the heart of this nation when I say we are a peace loving people, and that we are in this war because, and only because we are forced into it. If we did not desire above everything else peace, upon a basis of equity and justice which shall be lasting; if our hearts did not respond to the injustice, cruelty, and oppression of the people of Europe who, in their weakness, cry to the high heavens for succor; if we, as a nation, had considered our own selfish interests; perhaps it would have been possible for us to keep out of this world conflict. But we did not so reason, and I thank God for it. We heard the cry of the oppressed of Belgium, of France, and of all the rest, and under the leadership of that great and good man whom I verily believe God raised up for this hour of world-wide service, we have determined in behalf of world democracy, in behalf of honor at home and humanity abroad, to take a hand in the mightiest conflict the gods of war ever staged upon earth.

I say to you today, my friends, and I say it reverently, that in my humble opinion no holier cause could exist, and no loftier ideal could obtain, than that which prompts us today to give our sons and our resources on this sacrificial altar; and when the history of this hour in the world's affairs is written; when the passions of war shall have been supplanted by "peace on earth and good will toward mankind," the sacrifice of this nation will be comparable only to the sacrifice God Almighty made for a world in need two thousand years ago.

We are today in this war up to our very eyes, and we are in it to win, and win we will. Here and there you

hear a note of pessimism sounded; occasionally some cheap politician rushes into print to criticise this or that department for its inefficiencies or failures, but the facts in the case are: the progress our nation has made during the past few months in war preparation has astounded military men of the old world. They do not understand how we have been able to get so quickly on a war basis, and while, to be sure, there have been some mistakes made, we are fast becoming, in the truest sense, prepared for any emergency which may confront us. The business of this nation at this hour is *WAR*, and for the time being every other matter, however important, is of secondary consideration.

The transportation lines of the nation are needed, and by executive order billions of property and millions of men are commandeered, while the most cosmopolitan nation on the earth looks on with universal approval. A hundred million free people, boastful of individual rights and privileges, are directed to observe meatless Tuesdays and wheatless Wednesday, and out of pure patriotism such days are religiously observed by all. The engines of commerce, through executive order, are commanded to stand still for five consecutive days, that cargoes of fuel, supplies, ammunition, and men may move across the waters. Bowing to the mandate of the government, the doors of thousands of places of business are closed as if by magic, and the only note of disapproval comes from the politician. We, the people of the United States, are the government, and if there lives a man so craven as would in this hour withhold any possession, I care not how sacred, or who would think of his own selfish interests further than necessity forced him, he is not my kind of an American. Less than a complete dedication to God and country of all that we have and all that we are would at this time be unworthy of American citizenship. Feeling this way, you can understand how, when your Secretary invited me to address you on this occasion and left me free to choose my subject, I unhesitatingly determined to speak to you out of the promptings of my heart on the subject.

THE NATION'S CALL TO SERVICE

I need not take time to tell you that duty will call your sons to service in the trenches at the front; that has already been determined. I need not tell you that duty will call for sacrifice in money and service, as we shall from time to time be invited to purchase Liberty Bonds, to contribute to the Red Cross of the Y. M. C. A.; neither would I insult your patriotism or intelligence by pleading for your loyalty. These great questions are ever to the front and we shall continue to meet them as patriots. That particular patriotism about which I have elected to speak to you today has to do with the everyday affairs of life, and everyday affairs of life constitute a patriotic duty today as never before, perhaps, in the history of our country. Furthermore, life is made up largely of everyday affairs—the little things. Only a few of us will be called to serve at the front. Only a few of us will be called to sit in council with our leaders. However that may be, there is a patriotism each of us can render which is just as necessary as the other.

This is an organization of fruit growers, nurserymen, florists, and beekeepers. You might look the world over

and you could not beat this combination of industries necessary to the ongoing of society. You are wont to meet annually to consider the problems which have to do with your business life, and through exchange of ideas, endeavor to make more straight the path and more even the way of your business life. In this you are to be commended, for, through co-operation, you will accomplish much that would be impossible individually. Especially during the present, when conditions are unsettled; when no man would dare to suggest what an hour will bring forth, I urge you to keep very much alive your organization. The government, for obvious reasons, has recently determined to classify its industries, and I need not tell you where the classification places you. *You are the producers of food.* The crying need of the world today is food, and over a large part of the world, food is synonymous with America. America must feed herself and Europe, or a large part of Europe will starve. Do you grasp the significance of that statement? Let me repeat that you are producers of food, and that the world is verily starving for your products. Your products are as necessary a food product as wheat, corn, and all the rest. In the face of this condition, need I tell you how important is your avocation, and how necessary that you produce the maximum in your different lines. I say to you in all earnestness that it is your patriotic duty to produce every ounce of food possible, and that less than this would, under the conditions, be unworthy of you. I know that the inclination is to "hedge," to "keep close to the shore," but that policy today would be ruinous. I know, too, that the chances for profits in your line of business are minimized by risk, great always but especially so today, because your products are perishable, but we cannot afford to think of profits when a world is starving. I am a nurseryman and my individual policy is to plant normally in my general line, and to use every available plot of ground about the place in producing something which the world needs. I know what the consequences will be if the nurserymen of America go out of business. You orchardists are already finding it difficult to procure trees for your orchards, and if the policy of radical retrenchment goes on; if propagation of trees and plants is not kept up to normal, it does not take a prophet to tell the story of our failure.

When, under the stress of conditions brought about during the winter season through the congested conditions of shipping, my office was sought for relief, I directed the Secretary of the American Association of Nurserymen to go to Washington and place before the war shipping board certain facts, prominently this, that 90% of the products handled by the nurserymen represent *food products*, and that any serious interference with the movement of nursery stock meant a curtailment of food supply, the very thing the government says must not happen. I am speaking thus to you today, earnestly endeavoring to make you understand how important and how patriotic is your duty to make your business count 100% in efficiency during these days of world-wide sorrow and need.

YOUR RELATION TO LABOR

Not only has the government classified its industries, but it has endeavored to classify its men as well. The idea is, where is this or that man worth most. Where

can he serve best. If he is worth more on the farm, the nursery, in the orchard or greenhouse, than at the front, it would be poor statesmanship to send him to the front, and so the government determines. I think this, in its last analysis, is going to prove the wisest, the most salutary policy. It is just as patriotic to stay on the job at home and, with armed implements of husbandry, do our bit there, as it is, armed with a gun, to go to the front, and just as necessary. Every industry here represented is the employer of labor, and the world has long ago determined that he who contributes to the needs of labor is a public benefactor. A vast majority of the men and women of the land belong to the laboring class and, for reasons that we need not mention, are ineligible to army service. In your organization and mine they are an asset—in the army they would prove a liability. For this reason industrial fires of the nation must be kept burning. Labor must be fed and clothed, and to do this your organization and mine must be kept going. The present conditions force upon each of us who manage a business a patriotic duty as clear cut and imperative as ever came to us. The increased cost of maintaining your business will be met by your directors, but the increased cost of living for your employees is a matter that vitally effects society, and is one of the most serious questions which confront this nation. Someone is continually rising up to proclaim that labor is loyal to the government. Why is it necessary to repeat over and over that labor is loyal? No one finds it necessary to proclaim from the housetops that this or that or the other organization is loyal. I'll tell you why. There is an unrest among labor which is growing more and more ominous as the days come and go, all the proclamations of leaders of labor organizations notwithstanding, and there is a reason. The increased cost of living is proving a burden heavier than labor can bear uncomplainingly, and I again say that this is a question that vitally concerns each of us.

In preparation of this part of my address I sought facts from dealers in staples in food and clothing, and the conclusions reached are that it costs the laborer today 100% more to supply his family with food, and 50% more for clothing, than it did in 1915. The increase in the laborer's wage has not kept pace with the increased cost of living, and seemingly, the end is not yet. In the "Country Gentleman" of December 8, under the caption, "How Far a Dollar Goes," a page of photographic illustrations is given to this question, the facts being brought out by comparison before the war and now, and the subject treated is well worth our consideration. But why am I speaking to you of this, and how does it concern you? What I am trying to say is that inasmuch as we are employers of labor, any serious disarrangement of our industrial affairs, any interference with regular hours of labor, will cause untold suffering. It is almost impossible for the average laborer to meet current bills for his family with regular work. If he is out of employment a day or two during the week, or if there is sickness or death in the home, society must come to his relief or his loved ones suffer. Therefore, aside from any selfish considerations, loyalty to country demands that during these trying days we keep the shop open; that we keep the job alive, if for no other reason than that labor may find food and raiment. But life is

not all industrial, and there is another side to this question that I desire to speak of, and that is,

OUR PATRIOTIC SERVICE SOCIALLY

The most beautiful thing in all life is a disposition to help, to cheer and to comfort, and certainly we do not have to go far these days to find not one such opportunity, but many. Millions of homes all over this land are sad today because a son has gone out to fight for you and me. To that father and mother one thought transcends all others, that perchance "our boy will not come back, and if he does, what will this experience have done for him." I think of nothing more patriotic, I think of no service more noble, than a service of love and sympathy in word and deed to this father and mother who are sacrificing their very life's blood upon the altar of their country. Perchance this one called to the colors has been a breadwinner. Let us see that in that home left desolate no need which we can supply, whether that need be love or bread, be unsupplied. Another service we may render, and what a joyful service it should be, is to establish a line of communication with some boy in the camp or at the front. You may not think he cares particularly whether the folks at home are thinking about him, but he does, and telling him so will help him and you. Send him the periodicals after you have read them. A one cent stamp carries the magazine to some soldier boy, and everyone of them are "our boys," so it makes little difference where it lands or into whose hands it falls.

Furthermore, we are vitally interested as a nation, not only that our men return, but we are just as much interested in *how* they return. Will they come back to us morally fit? Will they come back to us in that sublime thing we call faith, faith in God and man? I tell you, my friends, that the line of communication should, if possible, be maintained. In line with the thought, the ladies of my church, under the leadership of my good wife, sent a Christmas box to each man who had gone out from this congregation, and I am impressed, and you will be, with a message which came from one young man, "It is a pleasure to fight for those who love us." This is not idle sentimentality I am speaking to you, but is founded upon the truest philosophy the world has ever known. Neither is it a new teaching I bring you. Two thousand years ago there lived the greatest Teacher the world has ever known, and being asked the direct question, what is man's loftiest ideal, he unhesitatingly declared, "that ye love one another." I, then, am not ashamed to stand before a twentieth century audience and declare that a call to service today is most fittingly answered in the commandment I have just repeated.

NEED OF THE HOUR—LEADERS

A leader is never a slacker. There has never been an hour in the history of the world, nor will there ever be, when men mentally and morally fit were not needed to lead the timid and fearful to higher ground, and certainly this is true in a peculiar way of the present. "Keep the home fires burning," represents sufficient patriotism to supply the hundred million Americans whose call to service will be in helping to solve the everyday affairs at home. President Wilson's call to service is a selective draft of every man, woman and child in America. We are engaged in the mightiest conflict the world has ever

known, and in the minds of some of our best and truest thinkers, we are fast approaching the "field of Armageddon." I know not if that be true—no man can know—and it matters not. What is of vastly more concern to you and to me is that today and every day we stand true to God and to Country. In all this there is a place for each of us. The question of the hour is, where can I serve best. If at the front where the shells fall thickest and where death and destruction lie in wait, then let me go to the front. If on the farm, in the orchard, shop or store, let me serve there. Or if by some word or deed I may lend a service overlooked, perchance, by all the rest, let me serve there. And when the end comes—and the end will come—when the gods of war shall have wearied of all this strife; when the doors to the temple of Janus shall again stand closed; when the principles of political economy as pronounced by President Wilson shall have been incorporated in a world peace compact, guaranteeing the world against a repetition of the crime of war, I think that the angel choir of heaven will again take up the refrain, "Peace on earth and good will to all mankind," because the world will have been purged of a principle of government antagonistic to the highest development of mankind, and to the will of God.

A WINTER "SIDE-LINE" FOR NURSERYMEN

Edwin Matthews

The old adage "necessity is the mother of invention" is again true.

This winter, which, to say the least has been an unusual one, and which perhaps will go down in history as a memorable one, has forced many new experiences upon us.

Notable among those experiences has been the "fuel question."

In many sections of the country and especially in large congested areas it has been seriously felt by the inhabitants, whose cry for coal went unanswered, the temperature meanwhile going down below normal degrees.

To see a need and to quickly fill it is the essence of good business, and so it was the privilege of some nurserymen this winter to step out of their usual path and routine and render "first-aid" by supplying wood by the truck load for fuel purposes. Some nurserymen we know have kept their usual permanent outside force engaged for many weeks in clearing a woodland of its dead chestnut trees and cutting same up into lengths and size to suit the usual open fireplace of the householder and to conserve coal by using it also in the boilers of their own greenhouses in which the important work of winter propagation is carried on with many lines of plants.

While we would not boast or presume to say that this line of action on the part of the nurseryman solved the "burning question" by any means, we must all admit that it did much to alleviate the condition and hence was

very commendable.

Another phase of the matter which must not be overlooked is the actual gain which resulted to the nurserymen.

Everyone of us knows that in the dull winter months "every little bit helps" and while the actual cash returns did not put us inside the pale of the "profiteer" yet it did help to keep the pay-roll going. At the same time, it kept around us intelligent and skilled workmen whose services we surely need when the busy spring season arrives and so in a broad sense of an up-to-date vernacular it "kept the home fires burning."

THIRTEENTH ANNUAL CONVENTION OF THE TENNESSEE NURSERY & FLORISTS' ASSOCIATIONS

The Thirteenth Annual Convention of the combined Tennessee State Florists' Association, Horticultural Society, State Nurserymen's Association and Beekeepers' Association was one of the most successful meetings ever held. The program, which was a very lengthy one from start to finish was elevating and carried with it the constructive idea of bettering the nursery business. There were probably two hundred in attendance. Out of state visitors were:

J. R. Mayhew, Pres. American Nurserymen's Ass'n.
L. J. Tackett, Editor "The Southern Florist."
J. A. Peterson, Cincinnati, Ohio.
John E. Evans, Richmond, Ind.
E. G. Hill, Richmond, Ind.
George E. Murrell, Horticulturist Southern Railway.
John Frazer, Huntsville, Ala.
R. C. Chase, Chase, Alabama.
Prof. G. C. Starcher, Auburn, Ala.
I. A. Isbell, Auburn, Ala.

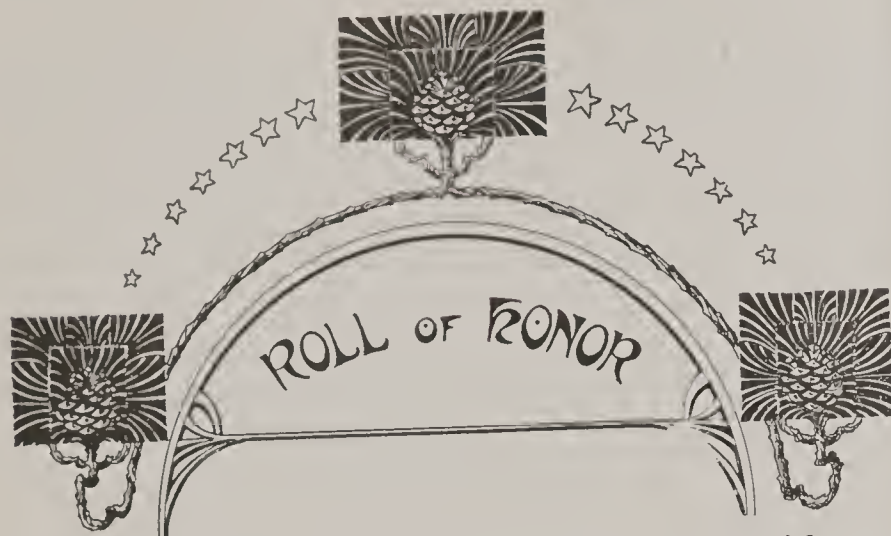
The florists of Nashville tendered the members and visiting friends an auto ride through the park systems of Nashville, and a visit was made to each of the florists after which a banquet was served at the Hermitage Hotel.

The flower and fruit exhibits were worthy of special notice, among them being a fine collection of roses from E. G. Hill, of Richmond, Indiana, and several of the begonias resulting from the experiments of J. A. Peterson, Cincinnati, Ohio. The fruits of Tennessee production were perfect types and impressed strongly upon the minds of all seeing them the adaptability of this state to the production of fruit.

The following officers for the Tennessee State Nurserymen's Association were elected to serve for the ensuing year:

President, George W. Poague, Graysville, Tenn.
Vice President, E. W. Chatten, Winchester, Tenn.
Sec'y-Treas., G. M. Bentley, Knoxville, Tenn.

According to the British Horticultural Trade Journal, members of the Wholesale Florist Trade last March pledged themselves to devote at least fifty per cent. of their open ground to food production and to grow only sufficient flowers and plants to keep the florist's trade alive, and preserve the stocks which will be needed for the immediate development at the close of the war.



It is the purpose of the National Nurseryman to publish a roll of honor consisting of the names of those nurserymen serving in the United States army in the present war. We shall appreciate it if our readers will send us their names and photographs if possible.

Howard E. Andrews, U. S. Signal Corps, France—Landscape Department, A. W. Smith Co., Pittsburgh, Pa.
 Carroll A. Bagby, Capt. U. S. Infantry—New Haven Nurseries, New Haven, Mo.
 Harold J. Bagby, Enlisted Medical Reserve Corps—New Haven Nurseries, New Haven, Mo.
 Lew. W. Bagby, Lieutenant (Junior Grade) U. S. Navy—New Haven Nurseries, New Haven, Mo.
 Oliver W. Bagby, Lieutenant, U. S. Navy—New Haven Nurseries, New Haven, Mo.
 Ralph B. Bagby, Lieutenant 21st U. S. F. A., Fort Riley, Kansas—New Haven Nurseries, New Haven, Mo.
 Robert E. Bagby, Cadet, Senior Class, United States Military Academy—New Haven Nurseries, New Haven, Mo.
 Marvin T. Carter, Royal Palm Nurseries, Oneco, Florida.
 John H. Chattin, Aviation Section of the Signal Reserve Corps, San Antonio, Texas. Secretary and Treasurer of the Winchester Nursery Company, Winchester, Tenn.
 David Collins, Royal Palm Nurseries, Oneco, Florida.
 Rupert K. Courtoy, Royal Palm Nurseries, Oneco, Florida.
 Harold C. Cowell, 224th Aero Squadron, Kelly Field, San Antonio, Texas. Swan River Nurseries, Patchogue, L. I., N. Y.
 William B. Drymon, Royal Palm Nurseries, Oneco, Florida.
 William Flemer, Jr., Private U. S. Expeditionary Force, Ambulance Corps, Battalion No. 23, Section No. 23, France. F. & F. Nurseries, Springfield, N. J.
 Clarence J. Galligan, 2nd Co., U. S. C. A., Fort Adams, R. I.—The Elm City Nursery Co.
 Dean Grauer, Royal Palm Nurseries, Oneco, Florida.
 Ralph Griswold, Royal Palm Nurseries, Oneco, Florida.
 Melvin Head, Royal Palm Nurseries, Oneco, Florida.
 Stout Hill, Royal Palm Nurseries, Oneco, Florida.
 John B. Hinson, Royal Palm Nurseries, Oneco, Florida.
 David L. Hires, Royal Palm Nurseries, Oneco, Florida.
 Edwin Hoyt, 1st Lieutenant of the Field Artillery, Officers' Reserve Corps, now stationed at Camp Grant, Rockford, Ill.—The Stephen Hoyt's Sons Co., Inc., New Canaan, Conn.
 Jackson & Perkins Co., of Newark, N. Y., have hung out a service flag with four stars in it. The stars represent:
 P. V. Fortmiller, Ordnance Department, Washington.
 Loren G. Olmstead, Sergeant, Camp Gordon, Ga.
 Clarence G. Perkins, Naval Radio School, Newport, R. I.
 Stuart Perkins, Chief Petty Officer, Naval Aeronautic Station, Miami, Fla.
 Thomas Jones, Royal Palm Nurseries, Oneco, Florida.
 Henry Edward Kelley, 1st Lieutenant, Company C, 165 Infantry, American Expeditionary Force, now in France.—The Stephen Hoyt's Sons Co., Inc., New Canaan, Conn.
 William P. Langdon, Third Officers' Training Camp, Yaphank, N. Y.—The Elm City Nursery Co.
 Lee Lesley, Royal Palm Nurseries, Oneco, Florida.
 Robert J. McCarthy, Sergeant, 101st Machine Gun Battalion, American Expeditionary Force now in France.—The Elm City Nursery Co.
 Albert F. Meehan, Third Officers' Training Camp, Yaphank, L. I., N. Y. Member of firm Thomas B. Meehan Co., Dresher, Pa.
 Wade Muldoon, Sergeant, Headquarters Military Police, Camp Hancock, Ga.—Thomas Meehan & Sons.
 Roy W. Nixon, Royal Palm Nurseries, Oneco, Florida.
 Mack Overstreet, Royal Palm Nurseries, Oneco, Florida.

Paul Rathert, Battery F., 128th U. S. F. A., Ft. Sill, Oklahoma, New Haven Nurseries, New Haven, Mo.
 Norman A. Reasoner, Signal Corps, Aviation Section, San Antonio, Texas. Royal Palm Nurseries, Oneco, Florida.
 Meredith P. Reed, Captain, Sixth Company Section U. S. Officers' Reserve Corps.—Vincennes Nurseries, Vincennes, Indiana.
 Philip Rouse and Julian Rouse, nephews of the Smith Brothers, now in the Naval Reserve, with headquarters at Jacksonville, Fla.
 Charles Schwentker, Battery F, 128th U. S. F. A., Ft. Sill, Oklahoma—New Haven Nurseries, New Haven, Mo.
 Charles R. Smith, Aviation Section of the Signal Reserve Corps, Aviation Camp, San Antonio, Texas.—Smith Bros. Nursery Company, Concord, Ga.
 Lawton V. Smith, nephew of the Smith Brothers, of Concord Nurseries, of Concord, Ga., now a lieutenant in the Aviation Section of the Army, and stationed near Toronto, Canada.
 Clay M. Stark, Stark Bros. Nurseries & Orchards Co., Louisiana, Missouri. American Field Service. Now in France.
 Lloyd C. Stark, Major of the Field Artillery, Fort Sill, Okla. Vice-President and a Director of Stark Bros. Nurseries and Orchards Co., Louisiana, Mo. President of the National Association of Nurserymen.
 Otto Sweat, Royal Palm Nurseries, Oneco, Florida.
 George Taylor, Battery "F," 108th U. S. F. A., Camp Hancock, Georgia.—Thomas Meehan & Sons.
 Ray R. Thompson, Royal Palm Nurseries, Oneco, Florida.
 Edmond Wallays, Royal Palm Nurseries, Oneco, Florida.
 W. R. Wedge, Royal Palm Nurseries, Oneco, Florida.
 Stanley V. Wilcox, Co. E. 103rd Engineers, Camp Hancock, Augusta, Ga. Thomas Meehan & Sons, Germantown, Pa.
 Claud Wilson, Royal Palm Nurseries, Oneco, Florida.
 Luther C. Wilson, Royal Palm Nurseries, Oneco, Florida.
 John T. Wilson, Royal Palm Nurseries, Oneco, Florida.
 William Whitted, Royal Palm Nurseries, Oneco, Florida.

The School of Horticulture for Women, Ambler, Pa., judging by the folder just received, is quite up-to-date. They are advertising War Courses in Vegetable Gardening, Fruit Growing, Canning and Preserving and Poultry, also lectures on practical work in Floriculture and a practical business course. These courses aim to equip the much sought after women officers for the land army who will train the raw recruits in producing our country's food.

Judging by the following clipping taken from "Forest Leaves," there is not much encouragement for nurserymen to grow and offer for sale tree seedlings, when the government grows them and offers them free. While it is very desirable to encourage the planting of forests, especially on waste land, some means should be adopted whereby free distribution will not come in competition with legitimate business.

No limit will be set this year on the number of forest tree seedlings by the Pennsylvania Department of Forestry for free distribution. Anyone who wants to plant trees this spring may have them for the asking. The only condition being that application for less than five hundred trees will not be filled; applicants must pay for packing and transportation, and the trees may not be sold, but must be actually planted in Pennsylvania for reforestation. No applications can be filled for ornamental trees.

The State Forest nurseries have raised more trees last year than ever before; but so many of the foresters have enlisted, and so few laborers are available, that the number to be planted on the State Forests probably will be even less than last year. Over 10,000,000 trees are ready to set out next spring, and as many more are in the nurseries, but are too small to plant this year.

The stock available for free distribution is almost all three years old, and includes white pine, Scotch pine, red pine, pitch pine, Norway spruce, European larch, Japanese larch and red oak.

—Forest Leaves.

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by

THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

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One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

Advertising rates will be sent upon application. Advertisements
should reach this office by the 20th of the month previous to the date
of issue.

Payment in advance required for foreign advertisements. Drafts
on New York or postal orders, instead of checks, are requested by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., March 1918

Subscribers to "Nurserymen's Fund for Market Development"

MARKET

DEVELOPMENT

What is needed to guide the nursery-
men's Market Development Movement
is a master of human nature, one who
can put spirit and life into it. To
many the movement is merely one to increase the nur-
serymen's sales and put dollars in his pocket. If this is the
end and aim of the effort it is surely doomed to failure for
it will carry no message to the people and will not in-
spire the needed enthusiasm on their part. Today we are
being brought close to the big and better things of life,
those that are basic, we have seen a vast empire fall to
pieces, because it lacked the inspiration of patriotism;
which would bind the people together, and we see another
great empire, because it was founded on principles of
equity, holding together under the greatest strain, and we
see our own offering freely its manhood and money be-
cause the spirit is there.

When it comes to dealing with masses of people the
spirit must be awakened before enthusiasm can be
aroused or all the publicity in the world will not produce
the desired effects.

It is very evident the originators of the movement were
fully alive to this fact or they would have named it a
Publicity Campaign rather than Market Development.

Does every nurseryman know that the more his pro-
ducts are known and grown, the more beautiful and bet-
ter will be man's surroundings?

The more interest the people take in them the happier,
better and richer they will be.

If the nurserymen believe and know this, then they

have a message worth while and Market Development
will only be a side issue.

The problem is how to shout this truth so that all will
hear and be convinced that it is so, become inspired and
enthused until the garden, or growing things become
the refinement of life and a work of pleasure for everyone.

Men and women have gotten too far away from the
ground, where they belong, by living in cities, the re-
action is taking place, in some parts of the world by force
of necessity, in others by realizing the emptiness of liv-
ing too high and fast.

It is up to those in charge of the Organization of Nur-
serymen for Market Development to have the vision and
inspiration and make others see and feel as they do.

It needs both the poetry and imagination of the dreamer
as well as the practical business man to make a success
of such a campaign as the nurserymen have undertaken.

If any nurseryman does not believe that the world
would be a better place to live in for everyone, if nur-
sery stock was planted one hundred times more than it is,
he had better get in some other business, and if he does
he should have the courage of his convictions and support
the effort to the limit of his ability whether he is a mem-
ber of the National Association or not. This is not a
movement of specialized advertising to benefit a specific
few but a movement aimed to improve every city, town,
and home in the country through a more general use of
the products produced by the nurserymen.

THE PAST WINTER

It is with much trepidation, nurserymen and others
will look forward to examining their plants to see how
they have come through the past, let us hope it is past,
winter. Not in the memory of man has it been so pro-
longed and severe over such a large area of the country.

Ice formed as far south as Miami, Fla., and zero
weather was experienced in parts of the Carolinas where
mild winters are the rule. It is to be expected that ten-
der trees will have suffered although it is hard to fore-
cast just what damage has been done until it is time for
the plants to come into leaf.

The heavy blanket of snow that covered the ground un-
doubtedly afforded great protection to the roots and pre-
vented much damage. The writer saw the trunks of vig-
orous oaks and cherry trees with longitudinal splits, sev-
eral feet in length, and fully two inches wide which were
caused by the intense cold. These, however, closed up
as the temperature got milder and apparently the trees
are none the worse.

Possibly there will not have been so much damage as
if there had been a mild spell followed by cold which
usually is so destructive.

It will be interesting to see the effect on privet hedges.

Today the writer saw a ten year old *Araucaria imbricaria*, Monkey Puzzle tree growing in a yard in the sub-
urbs of Philadelphia, and was informed it had been grow-
ing there several years. It was entirely unprotected and
growing in rather an exposed place. It had apparently
come through the past winter uninjured. A *Cedrus De-*
odara growing near it was badly browned.

It takes the experimental amateur to accomplish what
the expert often considers impossible.

THE PEACH-TREE BORER

By Wilbur C. Gillespie under the direction of J. P. Stewart, Pennsylvania State College

The peach-tree borer is the larval stage of a bluish green, wasp-like moth which is rarely seen by the orchardist, since it is shy in its habits and very inconspicuous. The adult moths emerge in Pennsylvania from about June 15 to September 15, the majority appearing from July 1 to August 15. Mating takes place at once, and the females under ordinary conditions oviposit on the trunks of the peach trees just at the surface of the ground. Each female lays from 200 to 600 eggs, which are reddish-brown in color, about one-fiftieth of an inch in length, and slightly flattened on the sides. In 9 or 10 days the young larvae hatch and begin at once to burrow into the soft wood of the peach trees. The partly grown larvae stop burrowing with the approach of cold weather and lie dormant over winter just beneath the bark or sometimes beneath small silken webs on the outside of the bark.

With the coming of spring they resume their tunneling, the greatest damage being done from that time until their full growth is attained, which is, in general, from the latter part of May to July 15. When full grown the larvae stop feeding and form small brown cocoons composed of silk intermingled with bits of bark and excrement. These are usually attached to the tree near the surface of the ground, although they may often be found lying in the soil near the base of the tree. Within these cocoons the larvae transform to pupae in about four days, and after a pupation period of 3 or 4 weeks the adult moths emerge. This performance completes the life cycle which covers normally a period of one year.

CHARACTER OF INJURY. The injury caused by peach-tree borers is due to the tunneling beneath the bark by the larvae. Young trees in the nursery row may be completely girdled and killed by a single borer. Mature trees are much better able to withstand the attacks, although the great number of borers often found in old trees usually more than makes up for the increased resistance of the trees. The work of the borers is usually confined to the area included within a few inches above and below the surface of the ground. Masses of gummy material intermingled with woody castings on the tree trunks just at the surface of the ground and a generally sickly appearance of the foliage are sure indications of their presence. Borers are never of any benefit to the tree, and the burrowing of only one or two is a considerable drain on the tree's vitality.

CONTROL MEASURES.—After the borers have become established in the trees, no treatment except digging them out with a sharp knife and a piece of pliable wire is practicable, on a large scale at least. The use of carbon bisulphide, potassium cyanide and similar materials to kill the borers in their tunnels was formerly advocated. It is now generally recognized that these materials are practically valueless for this purpose, due to the fact that the tunnels are solidly filled with gummy material which acts as an effective barrier to poisonous fumes.

Doctor Smith of the New Jersey Station stated in a bul-

letin published several years ago that where only a few trees are to be treated for borers hot water at a temperature of not over 175 degrees, applied about the crowns occasionally, will serve to keep them free from borers, provided the exudations of gum are first removed. This treatment belongs in the distinctly doubtful class, though it might be tried on a few trees, and the effects on both the borers and trees carefully noted.

Finding a material for use as a protective coating on the trunks with the object of keeping the borers out has attracted the attention of many experimenters and peach growers. The ideal material for this purpose would be one which would keep the borers out, not injure the trees, not be expensive, and would be elastic enough and adhere to the trees well enough so that one good application annually would maintain a good coating. Many protective coatings have been recommended by different stations. So far, no one of them can be unqualifiedly recommended on account of the fact that the results reported from their use have been so conflicting that no definite conclusions can be reached as yet. Some of the materials give promise of being of value, others have been found worthless, and still others have been proved to be actually injurious.

Of the materials tested at other stations, white lead and linseed oil, hydraulic cement wash, Hale's wash, and gas tar have been reported promising by one or more. Experiments carried on by the Pennsylvania Station from 1909 to 1912 have shown that white lead and oil paint is not safe on peach trees, and that ordinary cement coatings flake off too quickly to be of any practical value. In the case of the gas tar treatment, the Cornell Station found it to be the most satisfactory of any tried in an extensive test of different materials for use as washes, while in Missouri serious damage to the trees has invariably been reported from its use.

Whitewash, pine tar, tallow, and asafetida are some of those which may be classed as useless, and in the case of the tar, at least, dangerous. Washes containing paris green in large quantities, printer's ink, rubber roofing cement, and creosoting oil are some of those which have been found to be dangerous to use on account of almost certain injury to the trees.

Mechanical protectors of various kinds are sometimes recommended, but in general they have proved too expensive to maintain for use on an extensive scale. Furthermore, very few of them have been at all satisfactory. Wire cages, which theoretically should give perfect protection, seemed actually to attract the borers, according to results obtained from their use at the Cornell Station. Common paper protectors require too much care in keeping them adjusted to be practical. Tar paper has been known to cause injury to the trees through making the bark soft and tender, also on account of the promotion of sun scalding due to absorption of heat. Tobacco stems wound about the trees and tied have given fairly good protection, but the chief difficulty in their use lies in the fact that the strings binding them in place are likely to cut the trees, hence they require more care than is justifiable.

A new form of tree protector for the control of borers has recently appeared on the market. It consists of a flexible mat of tar paper which encircles the tree and a paste for sealing the mat to the tree. The protector has a

hole cut in the center to conform approximately to the size of the tree trunk, and a slit from the hole to the outer edge. Several sizes are put out for different sized trees, and each of them has slits in the edge of the center hole, so that slight variations in trunk girth may be allowed for. In principle the protector is designed to prevent the newly hatched larvae from crawling beneath the surface of the ground to enter the tree.

We have found that the protectors are somewhat difficult to apply and that they are rather hard to keep in place. The growth of the tree and the shaking by the wind tend to cause the paste to break loose from the tree, thus leaving an opening between the trunk and the protector, consequently the efficiency of the protector is destroyed until it is re-sealed to the tree. The principle seems to be good, however, and our test is being continued.

TREATMENT RECOMMENDED BY THE PENNSYLVANIA STATION. The first steps in the control of peach borers should begin with the setting of the young orchard. Examine each tree carefully and discard any that shows the slightest indications of the presence of borers. In the growing orchard the trees should be gone over twice each year, once as late as practicable in the fall and again in May. When examining the trees in the fall, the earth should be removed from about the crowns to a depth of several inches, and where masses of gum are present a careful search should be made for the borers with the aid of a sharp strong knife and a piece of pliable wire. Care should be taken not to cut across the grain of the wood more than is necessary. It is well, when removing the masses of the gum from about the crowns, to scrape off the accumulations carefully and throw them away from the tree a distance of several feet. By so doing some of the very young larvae which have not yet penetrated the bark may be destroyed, as they are unable to travel more than a few inches and they soon die. It must not be thought that all of the small white worms often found in the gum are young borers, however, as certain scavenger flies of the species, *Mycetophila persicae*, are known to deposit their eggs in this gum, and the resulting maggots somewhat resemble young peach borer larvae.

The bases of the trunks should not be left exposed longer than is necessary at this time. The soil should be slightly mounded about the trunks to serve as winter protection and to aid in healing up the freshly cut surfaces. Nothing will be gained by the application of any wash at this time.

When the search for borers is made in May, the above operation should be repeated. At this time the bases of the trunks should be left exposed for a week or so to toughen the bark, after which lime-sulphur solution should be applied with a spray pump at high pressure from the exposed crown up to a distance of two feet or more on the trunk. In this locality, to be most effective, the application should be made about the second week in June. When the wash has thoroughly dried, the soil should be mounded up to a height of 6 or 8 inches.

In a series of experiments carried on by the Pennsylvania Station during the three year period from 1909 to 1912 and again started in 1915, it was found that lime-sulphur solution in pure undiluted form can be used with entire safety on the trunks of peach trees. Commercial

concentrated material testing as high as 133 sp. gr. was used, and a better coating maintained than was possible by the use of the diluted solution. Some dilution may be preferable, however, in commercial practice, though it should not reduce the density lower than about 1.06.

Doctor Smith strongly recommends the addition of one pound of lead arsenate paste to each 5 gallons of the lime-sulphur solution with the idea in mind of poisoning the young larvae when they attempt to cut into the tree. On the contrary, extensive experiments carried on at the Cornell Station by Professor Slingerland showed practically no favorable results from the use of arsenicals in combating this borer.

In addition to this, recent investigations by the Pennsylvania Station, of serious injury to peach trees in several parts of the state, have indicated that positive injury may sometimes result from the use of arsenate of lead in combination with lime-sulphur on the trunks of peach trees. Chemical analyses of the diseased bark have shown that arsenic is present in injurious amounts in the affected tissues, and this particular type of injury has always been confined to the treated areas.

It is possible that the quality of the arsenate has something to do with the occurrence of the injury, but in view of the present indications, it is evidently doubtful whether important amounts of any of the commercial arsenates can be used with entire safety in this way.

It is also possible that a great deal of the injury ascribed to lime-sulphur and arsenate of lead combinations is due to winter injury. This type of injury is especially likely to occur when the soil is not properly filled in about the trees after the search for borers has been made. Further experiments on lime-sulphur arsenical injury have already been started.

The purpose of the mounding is to cause the females to oviposit well up on the trunk, so that if they lay their eggs on the tree in spite of the repellent coating, the resulting borers can be much more easily reached and destroyed. Furthermore, since the adult moths are very shy in their habits, many of them will seek other hosts upon which to deposit their eggs rather than those in the exposed situations at the tops of the mounds.

The coating of lime-sulphur should be maintained on the trunks until the end of the egg-laying season. Generally about two additional applications of the same strength material, applied in the same way, excepting that the mounds should not be removed, will serve to maintain the coating very satisfactorily. Under ordinary weather conditions the second application might well be made about July 1, and the third about August 15. These times may of course be varied in accordance with the condition of the coating previously applied.

The above recommended course of procedure, embodying a combination of the protective wash, mounding, and old digging-out methods has proved to be one of the most practicable and satisfactory at this Station, and the same treatment with slight modifications has been recommended above all others at the New Jersey Station.

Many practical fruit growers throughout the state have come to use this system of control, or to use others very similar to it in its essential points, and so far the results obtained have been very satisfactory. After a year or

two of the above treatment faithfully and carefully carried out, the borer problem should be so well in hand that the hardest part of the future care will be eliminated. Thorough cleaning up of rubbish in the orchard, and good cultural methods help materially in controlling the attacks of the peach-tree borers.

EMBARGOES LIFTED ON SEEDS AND NURSERY STOCK

Boston, Mass., February 21, 1918.

Orders have been issued releasing nursery stock and seeds from present and future embargoes, as follows:

January 10, 1918—Regional Director Eastern Railroads Seeds.

January 26, 1918—Regional Director Western Railroads Seeds.

January 30, 1918—Regional Director Eastern Railroads Seeds and Nursery Stock.

January 30, 1918, Regional Director Southern Railroads Seeds.

February 2, 1918, Regional Director Western Railroads Nursery Stock.

February 11, 1918, Director General Railroads.

All railroads and water carriers connected with railroads.

Seeds and by definite agreement with Counsel for the seed and nursery trade Associations of February 16th, supplementary order will be issued as a routine matter including nursery stock in General Order No. 1 of February 11, 1918.

Regional Divisions of Railroads and Regional Directors

General order No. 4 issued January 18, 1918 for the purposes of operating the Railroads of the United States classifies railroads as EASTERN, SOUTHERN, and WESTERN railroads, as follows:

EASTERN RAILROADS: The railroads in that portion of the United States north of the Ohio and Potomac Rivers and east of Lake Michigan and the Indiana-Illinois State line; also those railroads in Illinois extending into that State from points east of the Indiana-Illinois State line; also those railroads in Illinois extending into that State from points east of the Indiana-Illinois State line; also the Chesapeake & Ohio, the Norfolk & Western, and the Virginian railways.

SOUTHERN RAILROADS: All railroads in that portion of the United States south of the Ohio and Potomac Rivers and east of the Mississippi River, except the Chesapeake & Ohio, Norfolk & Western, and the Virginian railways, and also those railroads in Illinois and Indiana extending into those States from points south of the Ohio River.

WESTERN RAILROADS: All railroads not included in the above definitions and broadly speaking, all railroads in the territory west of Lake Michigan and of the Indiana-Illinois State line to the Ohio River and west of the Mississippi River from the Ohio River to the Gulf of Mexico, excepting those railroads in Illinois included in eastern territory and those railroads in Illinois and Indiana in-

cluded in southern territory, as above stated.

REGIONAL DIRECTORS

Mr. A. H. Smith, president of the New York Central, is appointed regional director with office at Room 3627 Grand Central Terminal, New York, N. Y., in charge of the operation of eastern railroads.

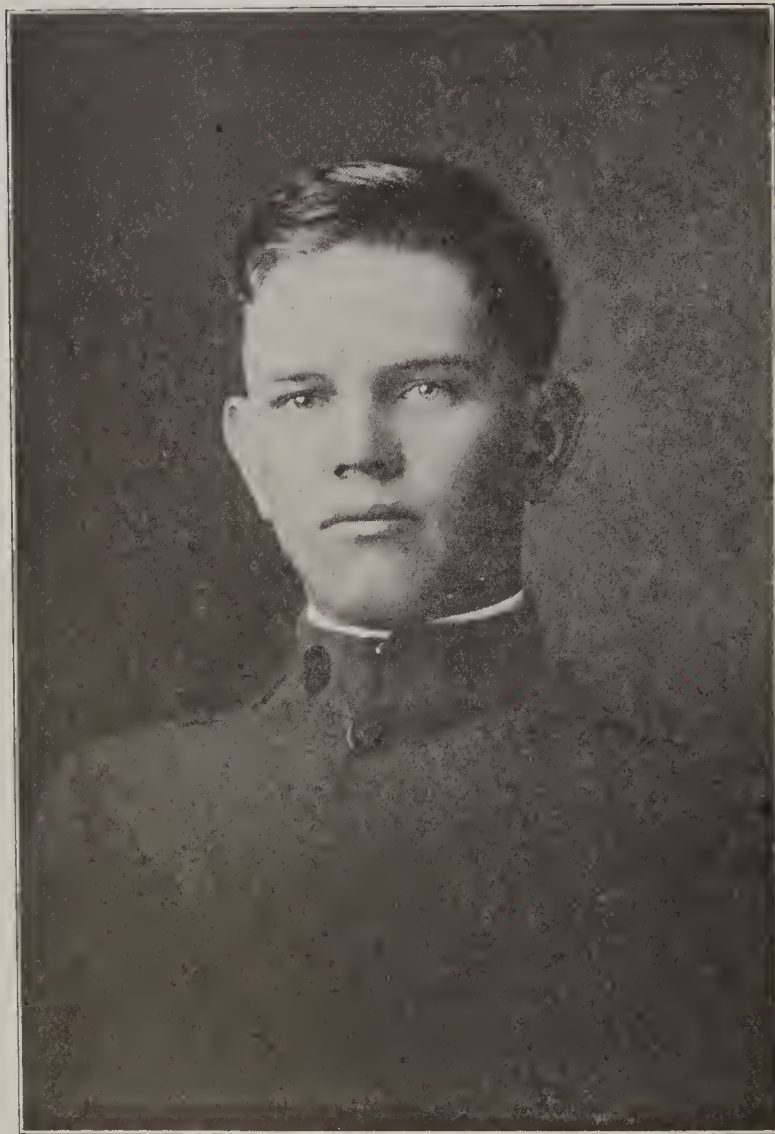
Mr. C. H. Markham, president of the Illinois Central, is appointed regional director, with office at Atlanta, Georgia, in charge of the operation of southern railroads.

Mr. R. H. Aishton, president of the Chicago & North Western, is appointed regional director with office at Chicago, 226 West Jackson Boulevard, in charge of the operation of western railroads.

Orders issued by the gentlemen named in their capacity as regional directors will be issued by authority of the Director General, and will be respected accordingly.

CURTIS NYE SMITH,

*Counsel, American Seed Trade Association,
American Association of Nurserymen.*



N. A. Reasoner,

218 Aero Squadron, now at San Antonio, Texas, but expecting to leave for France very soon.

The National Nurseryman is of too great value to discontinue.

THE CHAS. G. CURTIS CO.,
*Callicoon,
New York.*

IMPORTANCE OF THE F. T. D. DURING THE WAR

By Albert Pochelon, Before the Tennessee State Florists' and Nurserymen's Associations, Nashville, Tenn.

You have asked me to talk to you about how can the F. T. D. or rather the retail florist make himself real useful and beneficial to his trade, during the world war. I will try and talk to you in writing just my thoughts and happenings as they will present themselves in almost any retail store daily since this country went into the world war.

The old saying, "Its an ill wind that blows no one good," comes to my thoughts. Now, I happen to be an amateur sailor, and have been told that a man who can sail a boat well is able to forge his boat ahead of any other boat because he makes the best use of the wind he gets. He does not say, "If we had such and such a wind I could win this race." This same course holds good for the retail florists of today. It is absolutely no use lamenting about how unfortunate things are, take them as they come and you will find that the sooner you adapt your methods to the present war conditions in this country, the better you are off. I have seen some fellows sail a boat, and run away and keep in the lead where another fellow was not able to keep enough wind in his sheet to give his boat steering way, yet both had the same motive power, but one made use of every opportunity, and the other could not see nor take the opportunity because he was so busy growling and grumbling about the weather and other conditions.

Opportunity is the word today, or rather what opportunity has the retail florists' trade to work on at the present war conditions. Let every retailer get right down and do some thinking and I know some good will come out of it. Hundreds of opportunities are opening new fields for our branch of business, but the great trouble with 75% of the retailers today is they do not think of anything else nor are they able to connect our trade with this war in any other way than delivering or working up funeral flowers for the soldiers who have lost their lives for our country. What a silly way of looking for business and new fields. And what still more silly arguments can you get on this subject. Just think of the great many office boys today in cantonments, naval training stations, aviation fields and other branches of the army and navy. If they have no wives or families at home they have surely a sister, brother, or sweetheart and how can they better remember them than with flowers or flowering plants. They may have someone near and dear to them, ill or sick in a hospital. Flowers are the only thing you can send in a ease like this. There are birthdays, wedding anniversaries, new arrivals, and hundreds of occasions where nothing else than flowers seem a proper gift. Also figure out that out of 1,500,000 soldiers and sailors, officers and men, some of them are bound to be sick or ill in hospitals, and what looks better to them than a few flowers with a card and a few cheering words from friends and relatives at home.

Right here I have several arguments with patrons who think that it would be better for friends and relatives of injured or wounded soldiers, who may have to be in the

hospital for any length of time, to send them money and tobacco, rather than flowers. I have converted a great number of people by simply telling them that a package of tobacco and a five dollar note set alongside of a sick bed in a hospital in Manchester, England, where a good many soldiers and sailors are today recuperating, does not cheer them up as much as a few flowers with a card on same from home folks. Remember it must be sermons of this kind from the florists that will open new fields for our trade, and it is our retail florists who must constantly tell people that flowers today for humanity are absolutely necessary, and cannot and will never be considered non-essentials.

It is up to us, retail florists, to work hard to overcome our most bitter enemy which is commonly called, "False Economy," and which had the greatest amount of free publicity through the newspapers, who are forever printing things detrimental to the florist trade as well as to a great many other industries not directly connected with the production of war material. Yet, these very newspapers are today making a living only through the advertisements of goods they advertise on one page, and on another page they condemn the buying of such goods. Did you ever see the advertisement of ammunition factories or other war material manufacturers? No. Do you not hear every day some well-known speaker condemn candy, flowers, jewelry, etc? Get at the bottom of this talk and in a good many instances men of this type are most selfish, and do not consider anything else except their own glory, and in many instances they have an idea that they are doing the country the greatest favor. I say, they are not. Keep business prosperous. Keep things going. Don't try to kill off everything that is not connected directly with the manufacture of war material for the simple reason that everyone of us wants to share in the good work of buying Liberty Bonds, help the Red Cross, help the Y. M. C. A. and do our best to help the boys that went into service, to make the service, that they are rendering their country, for our sake, appreciated and fully recognized by us. Do you realize that some of these grandstand talkers would like to kill all business? But they do not think far enough, that if they kill business they will at the same time bar us out from giving liberally to the help that is needed by this great country. Not only the rich and wealthy manufacturers, the middleman and workingmen have surely shown their spirit and many poor men have done a great deal more toward the liberty loan in proportion to some of the men who are making great wealth out of their industries at the present time. They say, "Use flags as table decorations, instead of flowers." That is another poor phrase which is used commonly by some of our patrons. So many are great in preaching economy, but few are of the practicing kind.

Let us all help to save coal and eatables, but economizing on articles which are already manufactured or produced and which will spoil or become a loss, let us find sales for them and keep the money in circulation and the more we can all help to keep the money in circulation the better it is for all of us, as it will enable us to pay our bills when they come due and our customers can pay us promptly. Let it be up to every retailer to talk against

"false economy," and reason with our customers and we will surely all get along better in this world.

Down the pessimist with every chance that opens itself and look up and admire the optimist. There is nothing so bad that could not perhaps be worse. Let us make the best of everything as it comes along and remember that we are and must, out of self-preservation, sell flowers, talk flowers, and kill the enemy who even dares to say anything against our industry, or rather use the gas on him or her. Let these grandstand orators feel that we have an antidote for their gospel that is more effective than they surmise. Let us live to be sincerely patriotic and let us set a pace and give those who are working for us and share our burden, a good chance to make a living. That will make them also feel that they must do their bit for our country, the country that gives us the best living of any country in the world.

The florists of America and Canada are setting the pace and their industry has grown and kept step with every other industry in the new world. Are you going to let the newspapers, false economy criers, and a handful of insincere or thoughtless patriots, who can perhaps entertain a crowd of people with their oratory, but who do not think deep nor long enough and who cannot produce enough to supply their own individual needs, run your profession down or ruin your trade by making a man believe that he becomes a slacker or a pro-kaiser if he takes a bunch or box of flowers home to his sick wife or family or for his mother's birthday? Anyone that talks that way, I am sure will think nothing at all of buying the most expensive flowers for someone else's wife or lady friend, and that is surely nothing else but a traitor's work, war or no war.

Retail florists, let us all help to keep our profession on the high level that we have arrived at after so many years of the hardest kind of labor and study, and let us all help to bring it up to a still higher standard and we will surely win the admiration of the general public, without being called non-patriots and our trade being put on a basis of "non-essentials."

THINGS TIMELY AND IMPORTANT

By G. H. Bamm, Bristol, Tennessee, Before the Tennessee State Florist Association, Nashville, Tennessee, January 29th, 1918.

That I, a member who attended his first Convention only last year, should be called upon to follow our honored President on the program is to my mind rather unseemly and ill advised, but I shall be glad to make a few general remarks and hope if, by chance, it shall go to print that I may have better treatment at the hands of the printer than a certain restaurant man who gave a swell luncheon; in describing the same the paper announced the astounding fact that the guests partook of needle soup. The irate restaurateur sought the editor who passed the matter off lightly by saying it was a typographical error and that of course noodle soup was intended. So it is often hard for one to get his ideas put on paper.

The subject given me was "Things Timely and Important."

Now some are saying that the times are out of joint, and things all "out of whack" but I determined that I would leave war talk and the abominable weather out of this talk entirely and say a word or two on "Cooperation and Individual Concentrated Effort." To my mind one of the greatest assets we have today is co-operation. There is no line of business which admits of a wider range of improvement—more study or has a wider horizon than the business represented here today, and no man can afford to set at naught the opportunity of improving his prospects by rubbing up against his fellow florist and getting and giving as much as possible. I am happy indeed to meet with my fellow florists here today and hope to get and give something in the hours we spend together. We may co-operate in many ways, some united work is already in hand.

This Annual Convention is one of the means of getting all of us florists into touch so that we can teach and learn from each other to the continued betterment of the florist trade in our state. We can co-operate by showing the utmost courtesy to the visits of other florists, to our places of business and to their inquiries for information by mail. We can even offer a suggestion to our neighboring florists as to the best methods we have found in some particular thing, and we can cut out any petty jealousy which we may have imbibed and become broad-minded and act broad with our fellows for we can easily prove that such policy will beget better business for ourselves and we will in return gain much more than we can possibly give out.

We are now co-operating along the lines of the F. T. D. and the move for a National Advertising Campaign is admirable and should get every body's hearty support.

A better day is coming when we, through our annual gatherings can be brought together for a more thorough interchange of thoughts and working methods than any we have yet undertaken. Where experts will confer with us on all important subjects relating to our trade.

Could we have time here we might go into details about improved store methods, city delivery and shipping facilities. The best credit and book-keeping plans, the best construction and effective shipping and working houses, the legal side, safe and economical insurance and many other things which can best be worked out by the large number interested rather than the individual and save time, labor, and expense and increase the efficiency of our forces immensely, but the concentrated, undivided effort is what is also necessary to insure business. That florists who can cut out war talks, be neither a pronounced optimist nor pessimist, but just plod along, keeping his eyes open and his mouth shut—that is, trying to see everything which will make for the advantage of the trade and not prophesying nor complaining—he will give his best to his business and his business shall literally "blossom as the roses." If things look a little dark for us we must not worry nor stop our efforts. It is well to ponder the saying that "a good hen never stops scratching because worms are scarce"—Now is a good time to all pull together for better things and for each to look carefully at his own business, to mark the weak spots and make them strong again—with such effort we may duplicate the record business of 1917, nay, make a new and higher record for 1918.

LIST OF SUBSCRIBERS TO THE MARKET DEVELOPMENT MOVEMENT

"It ain't the guns nor armament
Nor funds that they can pay,
But the close co-operation
That makes them win the day.
It ain't the individuals
Nor the army as a whole,
But the everlastin' teamwork
Of every bloomin' soul."

—RUDYARD KIPLING.

The following are a list of those who have promised subscriptions to date.

\$50,000 is the goal. When this amount is promised the organization will begin to act.

	Amt. per Year for five Years
Adams Nursery Co., J. W., Springfield, Mass.	\$100.00
American Nurseryman, Rochester, N. Y.	10.00
Andorra Nurseries, Chestnut Hill, Penna.	250.00
Augustine & Co., Normal, Ill.	25.00
Aurora Nur. Co., Aurora, Ill.	50.00
Barr, B. F., Lancaster, Penna.	25.00
Beaudry Nur. Co., W. E., Chicago, Ill.	25.00
Bernardin, E. P., Parsons, Kansas	50.00
Bobbink & Atkins, Rutherford, New Jersey	250.00
Brand Nur. Co., Faribault, Minn.	50.00
Brandley, James, Walpole, Mass.	25.00
Breed, E. W., Clinton, Mass.	25.00
Bryant & Son, A., Princeton, Ill.	50.00
Chase Nursery Co., Chase, Alabama	250.00
Clinton Falls Nur. Co., Owatonna, Minn.	150.00
Conard & Jones Co., West Grove, Penna.	250.00
Corn Belt N. & F. Association, Bloomington, Ill.	50.00
Cumberland Nurseries, Winchester, Tenn.	?
Deerfield Nur. Co., Medford, Minn.	?
F. & F. Nurseries, Springfield, New Jersey	250.00
Farr, B. H., Wyomissing, Penna.	25.00
Framingham Nurseries, Framingham, Mass.	500.00
Hank & Son Nur. Co., Hankinson, N. D.	50.00
Harrison & Sons, J. G., Berlin, Maryland	500.00
Harrison Nursery Co., York, Nebraska	50.00
Heurlin, Julius, So. Braintree, Mass.	50.00
Hicks & Son, Isaac, Westbury, New York	250.00
Hobbs & Sons, C. M., Bridgeport, Indiana	100.00
Holsinger Bros., Rosedale, Kansas	50.00
Hoopes, Bro. & Thomas Co., West Chester, Penna.	250.00
Howard Lake and Victor N. Co., Howard Lake, Minn.	?
Hunt & Co., W. W., Hartford, Conn.	25.00
Ilgensfritz & Sons Co., I. E., Monroe, Michigan	250.00
Ingals, Irvin, Lafayette, Ill.	25.00
Jackson & Perkins Co., Newark, New York	250.00
Jewell Nursery Co., Lake City, Minn.	150.00
Jones, J. F., Lancaster, Penna.	10.00
Kelsey, Harlan P., Salem, Mass.	100.00
Keystone State Nursery Co., Pittsburgh, Penna.	25.00
Klehm's Nur. Co., Arlington Heights, Ill.	50.00
Leesley Bros., Chicago, Ill.	50.00
Littlefield & Wyman, No. Abington, Mass.	20.00
Lovett, J. T., Little Silver, New Jersey	100.00
McColgan Nurseries, Red Bank, New Jersey	10.00
McCormack, J. J., Lowell, Mass.	25.00
McFarland Co., J. Horace, Harrisburg, Penna.	250.00
Maloney Bros. & Wells, Dansville, N. Y.	?
Marshall Brothers Co., Arlington, Nebraska	50.00
Massachusetts Nurserymen's Association	100.00
Meehan Co., Thomas B., Dresher, Penna.	250.00
Momm's Cons Co., Irvington, New Jersey	10.00
Moon Co., William H., Morrisville, Penna.	250.00
Mount Arbor Nurseries, Shenandoah, Iowa,	250.00
Mount Hope Nurseries, Lawrence, Kansas	50.00
Muller, Adolf, Norristown, Penna.	50.00
Naperville Nurseries, Naperville, Ill.	50.00
National Nurseryman, Hatboro, Penna.	50.00
Northwest Nur. Co., Valley City, N. D.	50.00
Parker, Jim., Tecumseh, Okla.	?
Pennsylvania Nursery Co., Gerard, Penna.	25.00
Pfaender, William, New Ulm, Minn.	?
Pierson Corporation, A. N., Cromwell, Conn.	100.00
Plainfield Nurseries, Scotch Plains, N. J.	25.00
Prairie Nur. Co., Estevan, Sask., Canada	100.00

	Amt. per Year for five Years
Princeton Nurseries, Princeton, New Jersey	250.00
Reed, W. C., Vincennes, Indiana	50.00
Roehrs Co., Julius, Rutherford, New Jersey	100.00
Root, J. W., Manheim, Penna.	10.00
Rose Hill Nur. Co., Minneapolis, Minn.	50.00
Saddler Bros., Bloomington, Ill.	50.00
Shenandoah Nurseries, Shenandoah, Iowa,	250.00
Sherman Nursery Co., Charles City, Iowa	150.00
Simpson & Sons, H. M., Vincennes, Ind.	20.00
Smith Co., W. & T., Geneva, New York	250.00
Sonderegger Nurseries, Beatrice, Nebraska	50.00
Stark Brothers, Louisiana, Missouri	250.00
Stein, Geo. E., Wrightsville, Penna.	5.00
Storrs & Harrison Co., Painesville, Ohio	150.00
Swain Nelson & Sons Co., Chicago, Ill.	50.00
Texas Nursery Co., Sherman, Texas	250.00
Thomas & Son, Jos. W., King-of-Prussia, Penna.	25.00
Thurlow's Sons, T. C., West Newbury, Mass.	100.00
Tolleson Nur. Co., Lake City, Minn.	25.00
Uecke, Robert C., Harvard, Ill.	10.00
U. S. Nursery Co., Roseacres, Miss.	100.00
Vanicek, V. A., Newport, Rhode Island	100.00
Van Lindley Nursery Co., J., Pomona, N. C.	200.00
Waxahachie Nur. Co., Waxahachie, Texas	100.00
Weber & Sons Nursery Co., H. J., Nursery, Mo.	50.00
Wedge Nur. Co., Albert Lea, Minn.	150.00
Welch, E. S., Shenandoah, Iowa	250.00
Westover Nursery Co., Clayton, Miss.	100.00
Westover Nursery Co., Clayton, Missouri	50.00
Wohlert, A. E., Narberth, Penna.	25.00
Wright, George B., Chelmsford, Mass.	25.00

SPANISH GOVERNMENT AIDS FRUIT CULTIVATION

By a Royal order published December 9, the Spanish Government has appropriated \$2,160,000 to be expended in assisting cultivators of oranges, lemons, and grapes for exportation, in the Provinces of Alicante, Almeria, Castellon, Mureia, and Valencia. Loans made under the conditions imposed by this Royal order will not bear interest, but will be repayable to the Spanish Treasury during a period of five years at the rate of one-fifth of the whole amount each year.—*Commerce Reports*.

An appropriation has been included in the Agricultural Bill for the purpose of eradicating the Barberry Bush, which is said to be the distributor of the Black Rust which affects the wheat. It is planned to destroy the Barberry Bushes wherever found.

ADVERTISING THE NURSERYMAN'S GOODS TO THE CONSUMER

There have been nurserymen that have used printer's ink fortunately and successfully, possibly there are some who are doing it now and probably others will do it in the future. There are few nurserymen, other than those doing merely a local business, that can keep a business going without using it as much as finances will permit.

There are advertising men who will verbally convince you you do not know anything about advertising your own goods, and will prove to you by figures and examples that the only way you will get results is by engaging an expert who understands the psychology of it.

There are other advertising men who will assure you that in particular mediums immediate returns or direct orders will result; others again say this is neither advisable nor probable but the returns come in interested inquiries which must be developed into orders. In the writer's opinion it would be difficult to make a statement

in regard to advertising that would not be true under some conditions. There is no more illusive subject in existence. It is like fishing, done on a big scale by those who make a study of it, it can be made to pay big but for the dilettante or amateur, there are enough successes to make you keep on trying for the big catch.

The trouble is, it is so expensive at the end of the year, it is up to the nurseryman to decide whether to put the balance of his credit at the bank in advertising, stock or those improvements he has been figuring on so long or divide it among them.

It is useless to put it in stock and improvements unless the business shows a healthy growth so he goes fishing again, changes the bait and stream maybe, but it is taking the same sporting chance and perhaps just a little more chance than it should be. In the future no doubt advertising knowledge will be organized and become a science.

It is not that, at least not an exact one, nor will it be until the advertising man can present the nurseryman's goods as clearly, and as lucidly and as winningly as the dry goods store does its finery to the ladies.

The average woman would understand an advertisement offering Crepe de Chine or camisoles, and the average man would not. It is just as true that a great majority of men and women do not understand the nurserymen's advertisements.

NOTES FROM THE EXPERIMENT STATION RECORD

Fruit nutrition studies in charge of J. C. Whitten and C. C. Wiggans were conducted with strawberries, peaches, and apples during the year at the Missouri Experiment Station. The work with strawberries was confined to the use of fertilizers containing phosphorus, since previous results from the use of potassium and nitrogen were negative. Acid phosphate applied directly to the row, either the current year or the previous year, caused a marked increase in yield, while bone meal even at the end of the second year caused no increase. The question has been raised as to whether or not the effect of the acid phosphate may not be wholly or in part due to the acid condition possibly resulting from its application rather than to the phosphorus it contains. Studies are to be conducted along this line.

In the nutrition experiments with peaches the trees receiving nitrogen over a period of years are markedly larger, more vigorous, and carry a greener foliage than those receiving no nitrogen. Also by far the greater effect in increasing yield has been shown on the nitrogen plants. During the last year the fruits on the trees fertilized with nitrogen were noticeably smaller in size, but not sufficiently so to injure the market quality, the larger number of peaches more than offsetting the reduction in size. The peaches seemed firmer and in better condition for long shipment.

The work with apples continued to show the superiority of nitrogen fertilizers on young trees, although the trees fertilized with nitrogen were more subject to blight. Blight was also found to be twice as prevalent on trees where cowpeas were grown and turned under the previous year as on plats where the trees were in timothy or

alfalfa sod. Hence, it is concluded that where blight is destructive growers should use discretion in applying nitrogen fertilizer or in turning under leguminous crops. The results secured with fertilizers on older apple trees indicate in brief that the addition of fertilizer may or may not be profitable, depending on conditions in the individual orchard.

Among other investigations with fruits being conducted by J. C. Whitten work in breeding apples for late blooming habit was started. Planting tests of hardy fruit trees, such as the apple and pear, continued to show that fall planting causes uniformly much stronger growth than spring planting. During the last year late fall planting gave better results than early fall planting and late spring planting gave better results than early spring planting. The sour cherry profits more by fall planting, as compared with spring planting, than any other species that has been tested. The past year's results showed that approximately two-thirds of the spring-planted cherry trees died, while there was no loss among those planted in the fall. The surviving spring-planted trees made 23 per cent. as much growth as the fall-planted trees.

Based on the yields secured from four crops, Ben Davis apple trees grown from fruit buds selected from a productive parent have shown no superiority over those selected from an unproductive parent. A similar experiment in strawberry selection (E. S. R., 33, p. 236) covering a period of 10 years and now completed also gave negative results.

Self-fertility studies of fruits by J. C. Whitten and C. C. Wiggans confirm the previous assumption that certain commercial varieties of apples have a tendency to self-fertility. Varieties such as Delicious, Ingram, Ben Davis, Gano, and York appear to be capable of fertilizing their own flowers when planted in large blocks.

Observations made on fruit trees in connection with tillage studies by J. C. Whitten and C. C. Wiggans indicate that the formation of fruit buds is induced by highly concentrated sap and wood growth, and lack of fruitfulness is indicated by less concentrated sap. In the tillage studies the tree sap was found to be more concentrated in orchards where cultivation is not extensive and where apparently greater competition with sod crops exists. Sap studies are to be conducted for a number of years with the view of determining a possible correlation between sap concentration and tillage methods.

The studies of fruit-bud development of trees as influenced by treatments and previous crops, conducted by C. C. Wiggans, confirm the conclusion previously drawn that only a small percentage of the spurs blossoms two years in succession and even a smaller percentage matures fruit two years in succession. It was found in every case where tests were made that the concentration of cortex sap from bearing spurs was greater than that from non-bearing spurs, if the determination was made during or soon after the fruiting season. Leaf sap from nonbearing spurs shows a higher concentration than leaf sap from bearing spurs. The high concentration of cortex sap from bearing spurs appears to exist only while the spur has fruit on it. Later the bearing spur comes back to normal concentration. So far as observed, there is no co-relation between the number of leaves on a spur and its fruit development. Spurs bearing two or more

fruits show little or no difference in sap concentration from those bearing only one fruit.

Examination of buds in winter for forecasting probable bloom, as made by C. C. Wiggans, indicates that it is possible to forecast the probable bloom of apple trees. Further observations are being made with the view of developing methods of forecasting that may be used by the average grower.

FIVE YEARS' INVESTIGATIONS IN APPLE THINNING

E. C. Auchter, (West Virginia Sta.)

During this period one hundred eighty-seven trees of different ages, growing under different environmental conditions and consisting of the varieties Rome, Baldwin, York Imperial, Delicious, and Ben Davis, were under test. For the most part the experiments were not conducted continuously on the same trees owing to the failure of the trees to set fruit in certain years, hence the results for each season are presented in detail. Owing to the lack of an apple crop in 1913 a thinning experiment with peaches was conducted and is here noted.

The results from the thinning experiments as a whole indicate that it does not pay to thin in years of light crop production if the trees are vigorous and growing in fertile soil. Where apple trees are bearing from a medium to a heavy crop of fruit the removal of a part of this fruit by thinning is a very profitable practice. In all cases where the trees had a good crop thinning increased the size and improved the color of the fruit, thus enhancing its market value. The results of the experiments indicate that thinning does not influence subsequent crops nor cause trees naturally biennial in bearing habit to bear a crop each year.

Winter varieties of apples may be thinned just after the June drop, since much of the fruit removed by too early thinning will drop off naturally at the time of the June drop and the remaining apples on the thinned trees may then be thinned too much. In the case of summer or early autumn varieties it is suggested that it will probably pay to delay thinning until the fruit is large enough to use and then several thinnings should be made as the fruits size up. In most cases the best results were obtained when the fruits were thinned 6 to 7 in. apart. In the case of old trees bearing good crops 9 to 10 in. apart gave slightly better results.

One year in one lot of 12 trees the thinned trees returned twice as much net per tree as did the unthinned trees. Another year the thinned trees gave at least a 75 per cent. greater net return per tree. In some cases the increases were not so striking. The cost of thinning ranged from eight and one-third cents to forty-three and one-third cents per tree, depending on size of crop and tree. The author concludes that only a small part, if any, of the cost of thinning should be charged against the thinned trees, partly because the fruit thinned off would have to be removed at picking time anyway and partly because it takes much longer and costs more in sorting to pick out the larger amount of unsalable culls from the unthinned trees.

IS THE HUMUS CONTENT OF THE SOIL A GUIDE TO FERTILITY

Experiments conducted at Purdue University using a surface clay soil very deficient in organic matter and different organic manures are reported.

"The results of the vegetation and humification tests

seem to show that whenever there is rapid humification of manure the growth of the plant is greatly stimulated, indicating that 'the decay of organic matter is desirable in plant growth and not just its mere presence.' This was especially noticeable when green manures were rolled under and limed as compared with disking or mixing the manures uniformly with the soil.

"Certain of the manures seem to be as soluble in a 4 per cent. ammonia when just mixed with the soil as after humification. This was found to be true with alfalfa and steer and somewhat with cow manures. Horse manure seemed to humify slowly and its plant food was largely unavailable to corn during the first year, but the humification and vegetation tests show it becomes more available in the second year. It was possible to increase the rate of humification of horse manure in the first year by adding dolomitic limestone, which resulted in a greater yield of corn than where humification had not taken place.

"The organic residues left in the soil from manure treatment were not very effective during the second year in producing a growth of corn, probably because the most available or valuable complexes had disappeared in the first year. There is no apparent relationship between the percentage of ash in humus and the growth of corn. The humification and vegetation tests seem to indicate a rather close relationship between the amount of humus and the growth of corn."

COMMITTEE OF PUBLIC SAFETY FOR THE COMMONWEALTH OF PENNSYLVANIA

George Wharton Pepper, Chairman

Philadelphia, February 22, 1918.

National Nurseryman,

Flourtown, Pennsylvania.

Gentlemen:—

It has just been brought to our attention that fake reports have been circulated tending to discourage the making of maple sugar and maple syrup.

These reports are that the Government proposes to commandeer all maple products at a very low price.

The facts are that such reports are wholly without any foundation in fact, and, on the other hand, the Food Administration is urging the manufacture of all the maple products possible.

No one need have any fear of his product being commandeered by the Government, or, so far as we know, any prices being fixed.

It is very desirable that maple products be produced in the very largest quantities, particularly for home and local consumption, as the use of such products will relieve the cane and beet sugar situation very materially in many local districts.

Owing to the high prices prevailing on other sugars and syrups the manufacture of maple products should be particularly profitable this season.

Will you kindly give this matter wide publicity which will be of very considerable assistance to us at this time.

Thanking you for your very kind co-operation, we remain,

Yours very truly,

DEPARTMENT OF FOOD SUPPLY,

HOWARD HEINZ, *Director*.

By HARRY H. WILLOCK.

First Annual Meeting of the Illinois Nurserymen's Association

Held at the Hotel Sherman, Chicago, February 14th and 15th, 1918.

The Illinois Nurserymen's Association is to be congratulated on the success of its convention meetings held at the Sherman hotel, Chicago, on February 14th and 15th, 1918. From start to finish the meetings were characterized by a spirit of real interest in the uses of the organization. This state of things was undoubtedly brought about by the very appropriate opening address of the President, Mr. J. A. Young, of Aurora, Ill., which dealt with the subject "What the Illinois State Nurserymen's Association should stand for." After referring to the many benefits which might be gained if the nurserymen would unselfishly co-operate, he concluded by inviting full and free discussion of the subjects which would be introduced for their deliberation. This, he said, would be the means of making their meetings of real educational value and their motto must be "Onward March." This excellent suggestion met with a hearty response and almost everybody had something to say during the meetings. While there was no lack of good fellowship manifested, the whole of the proceedings were carried out in an orderly and businesslike fashion. Those who were fortunate enough to be present were no doubt fully convinced of the great help such meetings may become in promoting the success of the nursery business.

Leaving out all reference to the routine business of the convention, we may briefly review some of the subjects which came up for discussion.

Thursday Morning.

The many difficulties connected with railroad transportation at the present time were discussed at some length, but the belief was expressed that things would work better in the coming spring than they did last fall; the reason being that the railroads were working under pressure and would probably be more on the alert in the matter of pushing things forward.

In the discussion of the proposed Publicity Campaign which is to be brought before the next meeting of the National Association, several interesting points were introduced. One was that there is a distinction to be made between advertising flowers and advertising nursery stock; one was in demand all the year around, but the other for only a part of the year. The other point, which is of special interest to the nursery trade at the present time, was the statement made by one of the speakers and readily accepted by others, that the planting of trees and shrubs is not a luxury, but a "permanent improvement." As to the publicity campaign itself, the convention seemed to be in favor of supporting the scheme, but not to take any very definite steps until fuller information was available. At a later meeting the subject was again taken up and quite a number of subscriptions were promised to the Publicity Campaign Fund.

Mr. George Klehm, of Arlington Heights then read a paper entitled "The Propagation of Shrubs and the Varieties which should be grown for use in Illinois." In the course of the discussion which followed it was pointed out by one of the speakers that the nurserymen might

take advantage of the information which could be gleaned from the landscape men, as they are acquainted with the plants needed for certain neighborhoods. It would be found that certain stock is being replaced by more permanent types. The Viburnum will be a thing of beauty after the Philadelphus has passed away. The Government also gives information of great value on the subject. The hardy Hydrangea is one of the best shade plants we have; but it must be kept wet. As to propagating Hydrangeas, the chairman remarked that he believed there was more in taking the wood early enough, than in the future operations.

The question of forming a Central West Association then came up for consideration; and while there appeared to be some good points in favor of the proposition, the general opinion seemed to favor the idea that matters of more than local importance, could be best taken care of by the National Association. It was at the same time suggested that there could be a Central Association as well as the Illinois Association, but a vote taken on the question showed that the members were practically unanimous for a distinct Illinois organization. It was pointed out however, that this decision would not preclude the presence of nurserymen from other States who would always be welcome at their meetings.

One speaker referred to the old questions of prices and free replacement of trees and shrubs which die. He created some amusement by the spirit of resignation with which he appeared to view these matters. He said the question of replacements had been discussed during the 45 years he had been selling trees and he didn't expect to see any changes made in his lifetime. Someone had started replacing before his time and he thought it would go on for all time to come. Another speaker pointed out that there was no business in which there is not more or less replacing; and that if there is fault in the goods purchased, they should be replaced in justice to the customer. As to prices there may be just reasons for the variation of prices in different States.

Thursday Afternoon.

The opening paper of the afternoon session was by Mr. C. A. Krill, of Kalamazoo, Mich., on "How to Build a Storage House, and the proper methods of handling Nursery Stock in Storage." Any member of the Association who contemplates building a storage house will feel indebted to Mr. Krill for his paper. Among other things he emphasized the importance of the choice of location for a storage house. It should be near the railroad tracks and within easy access to the source of electricity and water supply. He then went into the details of constructions as carried out in the modern storage house erected at his own nursery. One outcome of the discussion which followed the paper, was the suggestion that even without the storage house, nurserymen might be able to prolong the planting season. Cases were mentioned of shrubs being planted in June and July, some of which were in blossom at the time, all of which turned out well. One

speaker told of a method of burying the shrubs "top and all" with the roots embedded in a wire basket. These could be dug any time in the summer and planted with success. He believed that with a scientific study of the problem it might soon be possible for nurserymen to plant throughout the year, and so do away with the present disadvantage of short planting seasons.

Mr. A. E. Nelson, of Swain Nelson & Sons Co., then introduced the subject "The Co-relation which should exist between Prices and the Cost of Producing, Selling and Distribution of Nursery Products." He said that although an ardent supporter of the "City Beautiful" idea and all such landscape improvement propaganda, he still maintained that the nursery business as a business, exists for the purpose of making profits. It is the profits which will make the business flourish and the absence of profit will make it go to the wall. And yet, he thought, the nurserymen held back from speaking about this important phase of their business. Perhaps they thought that as long as they managed their business all right, they would be making a good profit. But the fact was that nurserymen made very little profit. Compared with the skill involved, the amount of work done, and the chances taken, the profits made are comparatively meagre. There are wages for the men, and for the proprietors, if they give their time to it. Then the interest on investments which should be more than the interest on a Government Bond. They should not get together for the purpose of making exorbitant prices, but it seemed to him that 6% while a good return from a safe investment in bonds, was not anything like enough to repay the nurseryman for his efforts.

He called attention to the fact that nurserymen's products are distributed through many channels, each of which should be priced in accordance with cost of making sales and shipping the goods. While the cost of the goods remains the same, the cost of selling and shipping varies enormously. The prices therefore should vary in the same proportion as these costs. And while the cost of selling to the trade is very low, because the same customer is sold to every year, selling to the consumer is expensive because new customers have to be found for each sale. It is therefore a great injustice to the retailer who has developed a prospective sale if he has to compete with the wholesale prices that are so indiscriminately sent out by many nurserymen. In illustration of the point he desired to make, Mr. Nelson exhibited a chart which showed that although the wholesale and retail prices varied greatly, the net profit on a \$100.00 sale is practically the same in the wholesale and retail business. Also, another matter connected with this question of profits is the value of the dollar. A dollar is worth merely the amount a dollar will purchase, and it shrinks or expands in value according to the price of commodities. The dollar now is worth only about fifty cents compared with its value in 1896. While money has depreciated, the cost of labor has gone up correspondingly. This is why the question of making fair profits on their stock is a serious one.

After going into considerable details regarding the various methods of computing cost, Mr. Nelson closed his address by expressing the belief that the nurserymen could get together and discover a solution of the problem of profits which would be for the benefit of all.

It is almost unnecessary to state that this question of "profits" created considerable interest. Mr. Nelson's figures were accepted as a reasonable basis of computation and it was realized that more attention would have to be given to the matter than had been done in the past. As to the fortunes made by nurserymen, one speaker thought there were some who were making good money out of the business. The consensus of opinion seemed to be in agreement with the position taken in Mr. Nelson's address, and that it would be a good thing for the Association to look for expert advice on this subject.

The next paper read was by Mr. A. H. Cultra, of Onarga, Ill., on "How to properly pack Nursery Stock." A brief discussion followed on the various methods of packing for shipment and emphasis was laid on the importance of keeping the stock in the dark whether in the bins or on transit.

At the Round Table talk presided over by Mr. John M. Wise, of Freeport, Ill., several subjects were taken up, and the chairman made some excellent remarks of an optimistic quality as to the great possibilities for future growth of the nursery business. He drew attention to the enormous development of landscape planting in the suburbs of large cities and country towns which would more and more demand the products of the nurserymen.

Friday Morning.

Most of Friday morning was occupied with the consideration of matters connected with the various State Inspection laws in relation to the nursery business. The subject was introduced by Mr. P. A. Glenn, State Inspector of Illinois, who read a paper on "The Inspection of Nurseries, Home Grounds, City Trees, Parks, etc." The subject was very fully treated by Mr. Glenn and led to considerable discussion. It was argued by some that many of the present difficulties and annoyances connected with the shipping of nursery stock would be obviated if there was an Interstate Law which would make it allowable to ship stock to all other States under the certificate of the State in which it is grown. It was also claimed that the embargoes placed on shipments of certain plants into Illinois operated unfairly against the loyal nurserymen of the State inasmuch as there was no effective method of keeping out such plants when they are sent direct to the consumers by mail. Mr. Glenn explained that all such shipments were illegal and that efforts are being made to prevent the same. One speaker asserted that the quarantine law in regard to certain fruit stock was absolutely unjustified and inconsistent. Although the Pine Blister Rust had existed in the east for the past 15 years, it had not affected Illinois. For forty years Ribes had been imported into Illinois from the infected areas, but during that time there has been no case of infected Ribes in this State. It therefore appeared to be an entirely unnecessary restriction.

A resolution was ultimately moved and approved, asking the Department of Agriculture to modify the Pine Blister Rust quarantine to the effect that Ribes may be admitted into Illinois from any uninfected nursery. From further information given to the meeting it appeared that there was expectation of the early modification of the quarantine.

A hearty vote of thanks was accorded to Mr. Glenn for his attendance at the convention and for the valuable as-

sistance he had rendered.

Mr. A. M. Augustine then spoke on "Some New Varieties of Fruits that should be of interest to Nurserymen." He was well able to handle the subject on account of his many years' experience, and his connection with the State Experiment Station. Among other things he advocated the restriction in number of the varieties of apples now grown in Illinois; pointing out that a decision can be made now as to the most desirable varieties to retain as the matter had passed the experimental stage so far as Illinois was concerned. Great care should be taken when introducing new varieties of fruits as it was a very expensive proposition.

Friday Afternoon.

The afternoon proceedings opened with a paper by Mr. Thos. A. McBeth, of Springfield, Ohio. He commenced by expressing his great pleasure at being present at the meetings of the Association, and hoped he would be able to attend on many future occasions. He had always thought Illinois was a great State and deserved a Nurserymen's Association. He was inclined to think Chicago had got New York beat, and would ultimately become the biggest town in the United States, if not in the world.

Mr. McBeth's paper was on "The Propagation of Conifers" and although he had previously questioned his qualifications for treating such a subject, it was soon made evident to his hearers that he was a reliable authority, who knew what he was talking about. He confined his paper entirely to the propagation of conifers from cuttings; commencing with the consideration of the difference in nature of evergreens and deciduous plants; using as a comparison the hibernating habits of the toad and the bear. The deciduous plants become entirely dormant like the reptile, while evergreens like the bear only become partially dormant. This analogy, he explained would not hold good in every detail. In reply to questions put at the close of his paper, he stated that his custom was to take cuttings all the winter as this can be done as long as the thermometer is not below freezing. He was at the present time experimenting in propagating cuttings in cold frames. There used to be a rule that every cutting must be made with heel cuttings, and while he took cuttings from any place, it might be that nicer root systems were obtainable from heel cuttings.

These notes must not be looked upon as in any way giving a complete record of the doings of the Association, but enough has been given to prove that the Illinois Nurserymen's Association has started its career under very favorable auspices.

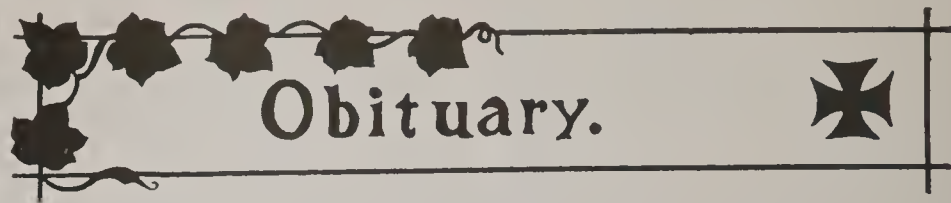
The following officers were elected to serve for the ensuing year:

Guy A. Bryant, Princeton, President; Alvin E. Nelson, Chicago, Vice-President; Clyde L. Leesley, Chicago, Treasurer; A. M. Augustine, Normal, Secretary; additional members of the Executive Committee, Arthur Hill, Dundee; F. W. Von Oven, Naperville, and William Sadtler, Bloomington.

FIRE AT F. H. STANNARD & CO.

F. H. Stannard & Co., Ottawa, Kansas, had a disastrous fire on January 16th. It destroyed one packing house with all its contents.

No insurance.



Obituary.

JACOB UHL

Jacob Uhl, one of Dansville's Civil war veterans, died at his late home in South street February 8, aged 73 years. He was born in St. Wendell, Germany, coming to America at the age of 6 years and living in Dansville ever since. He was under 18 years when the war broke out and going to Mount Morris enlisted in Company K, Sixth United States Cavalry. He served three years, taking part in many of the important battles.

Mr. Uhl was one of the oldest nurserymen in Dansville. He entered the business in 1866 and retired in 1900. He held various offices in the village, serving two years as trustee. Besides being a member of Seth N. Hedges Post, G. A. R., he was a devoted member of St. Boniface Society of St. Mary's Church, of which he was president for nearly twenty years.

THE BILTMORE HERBARIUM

The botanical library and famous Biltmore Herbarium of the late George W. Vanderbilt was recently given by his widow to the Smithsonian Institute.

The Herbarium was unique and extremely valuable. The flood of 1916 destroyed something like 70,000 specimens, but still it was recognized as one of the largest and most interesting collections in the South Atlantic States. The 20,000 specimens sent the Smithsonian will be of increased value, as supplementing other specimens of kinds it had already, and its arrival there gave the authorities a time of rejoicing.

The Vanderbilt Herbarium represented about twenty-five years of painstaking and systematically directed collecting in a region noted as containing more different varieties of flowers, shrubs and trees than any other part of the United States. But for the ruin wrought in Biltmore nurseries by the floods the herbarium would not have been sold. It was used very largely to supplement them. Even during the winter, when most plants are dormant, they could still be seen and studied in the beautiful Herbarium specimens.

It will be remembered that Dr. Asa Gray felt a keen interest in the flora of the North Carolina mountains and made among them several notable collecting trips which form the subject of some most interesting pages in his *Life and Letters*. Among his *Scientific Essays*, edited by C. A. Sargent, some of his journeyings among our mountains are detailed most interestingly. The relationship of plants found here to those of Japan and China helped to confirm his theories of plant migration and structural botany. Western North Carolina is sorry to lose the Biltmore Herbarium and botanical library, but in Washington it will doubtless be a great deal more useful.

L. G.

Practical Cooperation Illustrated

"The first car has arrived and the stock is first-class. We pay you a good price for it but we have no regrets when we get such stock as you sent us."

Don't overlook the point to that, for it is fundamental: They don't regret the price because they got value. The price meant something; it was a measure.

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"Incidentally, if it is going to help the Princeton Nurseries we should like you to use it."

"We are indebted to you for courteous treatment and first-class stock. We would not hesitate a moment to say that the best stock we received last fall came from Princeton Nurseries—and say it out loud."

Very truly yours,

WOOD STUBBS & CO., by H. H. Greene."

Louisville, Kentucky, Feb. 18, 1918.

Testimony submitted to The Trade by

PRINCETON NURSERIES at Princeton in New Jersey

March first.

We sell to Nurserymen Only.

Subscribers to "Nurserymen's Fund for Market Development."

WANTED

We need a good salesman, with practical knowledge of Nursery stock, well experienced in traveling and selling. He must have initiative, a fair education, and in fact be competent to fill a good permanent position. In replying, give details of past experience.

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RUTHERFORD, N. J.

FOREMAN WANTED

Man with ability to have entire charge of large packing cellars. Must be able to handle men and understand propagating ornamental shrubs, perennials, etc. A permanent position for the right man. State salary expected, experience and reference in first letter.

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Strawberry Plants

of selected money making and garden variety. Clean roots and clean foliage plants of the highest fruiting quality.

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Choice assortment, mostly H. T.'s

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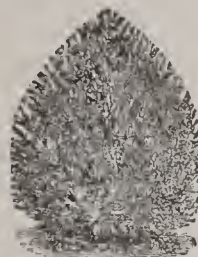
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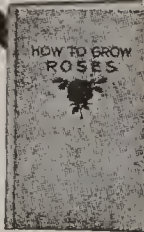
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If you need Everbearing strawberry plants to fill spring orders or if you wish to increase your planting in nurseries, we can supply you with genuine PROGRESSIVE Everbearing plants, guaranteed to be TRUE TO NAME and handled so as to reach you in best of growing condition. Write for prices.

We have been growing and breeding the Everbearing strawberries for the past eight years and have many new varieties growing in our experimental grounds that are not yet for sale. We invite a personal visit to our grounds during fruiting season, preferably during August or September. The latch string is always out.

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D. H. HENRY
Seneca Nurseries
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Let us make you quotations on
 Apple, Std. and Dwf. Pear, Cherry, Plum,
 Peach, Quince, Apricot, Small Fruits, Grape
 Vines, Ornamental Trees and Shrubs.

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Offer a general line of Fruit and Ornamental Trees, Shrubs, Roses, Vines, etc. A fine line of cut leaf weeping Birch, 4 to 5 ft., 5 to 6 ft., 6 to 8 ft., and 8 to 10 ft. These are straight, smooth, well rooted trees. Blowers B. B. root cutting plants, Hydrangea P. G., Spirea Van Houttei and Anthony Waterer. All stock clean, thrifty and up to grade specified.

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The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock.

Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed.

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Palms and General Decorative Plants, **INSPECT**
Conifers, Shade and Ornamental Trees **INVITED**

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CLAY POTS AND PANS, shipped direct from Pennsylvania
Pottery to purchasers; for list and terms address

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Strong, well-rooted plants
50,000 surplus to offer trade
SPRING 1918

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Headquarters for
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1200 Acres "At it 25 Years"

Strawberries	Currants	Rhubarb
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100,000 transplanted Raspberry, Blackberry and Dewberry plants
for retail trade. See wholesale list before placing your order.

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General Nursery Stock and Nursery Supplies

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PEAR, one and two year, mostly Bartlett.
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SHADE TREES in assortment.
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Our Trade List is now ready; a postal card will bring it.

A Large Stock of Apple, Pear, Cherry and Peach Grape Vines, Blackberry and Raspberry Plants

And a general line of ORNAMENTAL TREES
and SHRUBS. All stock clean and thrifty, the
best that can be grown.

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We offer for Fall 1917 and Spring 1918, general line of
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We expect to be in position to offer Natural Peach Seed,
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Azalea mollis, Rustica and Ghent in all the leading varieties,
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Standard, Climbing, Weeping and Dwarf Roses in great variety
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Green and River's Purple Beech in all sizes up to 12 feet.

Prices and full particulars on application.

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This New England soil and cli-
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Special trade prices. By the thous-
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STEEL BOX STRAPPING

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What is it?

There will be no Raffia for sale this year. Government requisitioned all of it for war purposes.

What will you do for budding this year?

USE "BUDTIE" OF COURSE

Write us for samples and prices at once.

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Introducers of "Budtie"

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EXTRA Special values in Eng. and Cal. Privet, Heavy Pyrus Japonica, Berberis Thun. 1 to 4 years, Maple, Poplar, Elm, Birch, Mountain Ash, Horsechestnut and Weeping Birch, also quantity of well rooted Dorothy Perkins. Large general line at greatly reduced prices.

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Dominion Nursery Company

VANCOUVER, B. C.

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We want your order—large or small—

FOR

APPLE, 2 and 3 years,
PEACH, 2 years, Good,
STANDARD PEARS.

List of Varieties upon request.

CALIFORNIA PRIVET, 2 year, well branched, 2-3 ft.,
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Special prices on carload lots.

ASPARAGUS, 2 year strong.

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GRAPES, 1 year, good stock.

ASK FOR OUR TRADE LIST.

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"Harrison Grown"

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We have blocks of them that are the finest we have ever seen. They are 8 to 16 feet high, with perfectly straight trunks. The heads are broad, symmetrical, with lower branches at least 6 feet above the ground.



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Press of Robinson Publishing Company, Hatboro, Penna.



THE NATIONAL NURSERYMAN



APRIL 1918

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

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Established 1847.

Offers a Fine Stock of

*Peach, Gooseberries,
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Other Ornamental Shrubs,
H. P. Roses, Etc.*

Will be pleased to quote on your list of wants

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Monroe, Mich.

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E. S. WELCH, Pres.

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Large supply of best quality. Grades unsurpassed.

APPLE GRAFTS—made to order. If short of labor, let us make your grafts for you. Satisfaction guaranteed.

Ask for Trade List and Bulletins. Send us your list of wants.

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Reliable Holland Nursery Stock

OF EVERY DESCRIPTION



FELIX & DYKHUIS

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Conifers, Rhododendrons, Roses
Young trees for lining out, etc.

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(a long list)

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EVERGREENS

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CLIMBING VINES

BERBERRY THUNBERGII

CALIFORNIA PRIVET

FRUIT STOCK

(a fine assortment)

Read through carefully. All in storage except Evergreens and a few Ornamentals. You want Early Shipment. We can make it.

Please let us have your order at once. Thank you.

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A Co-operative National Campaign to Create New Business for Nurserymen.

Ask us about it.

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FROM NOVEMBER FIRST TO MAY FIRST

We supply leading fruit growers, nurserymen and dealers with fine strawberry plants.

Our plants are healthy, heavily rooted, and guaranteed *true-to-name*.

We grow all the leading standard and everbearing varieties.

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SPRING OF 1918

A fine lot of

Apple Seedlings
Japan Pear Seedlings
Forest Tree Seedlings

ALSO

APPLE TREES
PEACH TREES
PEAR TREES
CHERRY TREES
FOREST TREES

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Just Arrived From

VINCENT LEBRETONS NURSERIES
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Offered in Case Lots Only—Subject to prior sale

CASE No. 317

10,000 APPLE Seedlings, 1 yr., untr. $\frac{6}{10}$ m|m
200 MAZZARD Seedlings, 1 yr. $\frac{6}{10}$ m|m

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7,500 APPLE Seedlings, 1 yr. untr. $\frac{7}{12}$ m|m
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2,000 MYROBOLAN Seedlings, 1 yr. $\frac{3}{5}$ m|m
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500 MAHALEB Seedlings, 1 yr. $\frac{5}{9}$ m|m
1,800 QUINCE, Angers Cuttings 1 yr. $\frac{6}{10}$ m|m
Stock guaranteed in good condition—Write for prices.

BAMBOO CANE STAKES

Natural color, 6 feet, 2000 per bale.
" " 8-9 feet, 600 per bale.
Dyed green, 2 ft., 2½ ft., 3 ft., 3½ ft., 4 ft., 5 ft., etc.

Write for prices and particulars

McHUTCHISON & CO. THE IMPORT HOUSE

95 CHAMBERS ST.,

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Subscribers to "Nurserymen's Fund for Market Development."

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SPRING IMPORTATIONS NOW ON HAND

BOXWOOD

Bush. Sizes 12 inch to 48 inches
Pyramidal. Sizes 30 inch to 54 inches.
Globe. 12x12; 15x15; 18x18.



PYRAMIDAL BOXWOOD



RHODODENDRONS

ROSES

BABY RAMBLER TYPE: Strong, thrifty stock in all leading varieties. The best selling proposition for this year's hardy bedding sales.
HYBRID TEAS: Good assortment of leading popular sorts, all shades of colors. Not many in the country,—order at once!
HYBRID RUGOSAS. Best sorts.

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HIGHEST QUALITY HOME-GROWN
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SMALL FRUITS

NUT TREES

ORNAMENTAL DEPARTMENT

DECIDUOUS TREES

EVERGREEN TREES

SHRUBS---ROSES

HARDY PERENNIAL PLANTS



BABY RAMBLER ROSES

RHODODENDRONS

Hardy hybrid, grafted sorts suitable for all Northern planting:

18 to 24 inches

24 to 30 inches

30 to 36 inches

BALLED MAGNOLIAS

Soulangeana. 4-5 ft.; 3 to 4 ft.

Speciosa. 4-5 ft. only

Lennei. 4-5 ft.; 3-4 ft.

Alba Superba. 3-4 ft. only

Halliana. 2-3 ft. only

HARDY AZALEAS

Mollis—Mixed colors. 12-15 in.; 15-18 in.; 18-24 in.

Pontica—Named colors.—18 in.; 18-24 in.

DUTCH PIPE

Strong 2 yr. stock

JAPAN MAPLE

Atropurpureum.

2-3 ft.; 3-4 ft.

Dissectum Ruborem.

1½-2 ft.; 2-3 ft.

THE STORRS & HARRISON CO.

NURSEYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

The
Preferred
Stock

The
Preferred
Stock

A customer once said to us

**"It is positively uncanny, the way you
always have scarce articles to offer."**

Well! We have been in business forty years and ought to have learned something in that time. We "keep our ear to the ground" and then make our plantings and purchases according to our forecast of the demand.

**That is why our Bulletins of unsold stock
are of especial value to the trade. They
generally offer many desirable articles
not easily located.**

Bulletin No. 4 was mailed March 22nd.

Did you receive it? If not, it will be gladly sent on request,—if you are in "the trade."

Jackson & Perkins Company
NEWARK - - NEW YORK

The
Preferred
Stock

The
Preferred
Stock

Subscribers to "Nurserymen's Fund for Market Development."

Heikes—Huntsville—Trees



Established 1872

1500 Acres

**FRUIT TREES
ROSES and other
ORNAMENTALS**

**For the wholesale trade.
All of our own growing.**

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

An Established Nursery for Sale

On March 13th, 1918, the charter of the P. J. Berckmans Company expired by limitation. The stockholders of the corporation decided not to ask for a renewal of the charter, but to close the affairs of the company. To conform to certain legal requirements, L. A. Berckmans, former President of the corporation, was appointed Receiver, but the receivership in no wise grows out of financial embarrassment, for the corporation is entirely solvent.

**Stock, Implements
Good-will for Sale**

The Receiver offers for sale all the growing nursery stock, a list of 27,000 live customers, landscape department and outfit, implements, wagons, live stock, and good will. Full details of the property may be secured by addressing

L. A. BERCKMANS, Receiver
For The P. J. Berckmans Co.
Augusta, - Georgia

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of Own Root Roses

ORNAMENTAL TREES SHRUBS
BERRIES CLEMATIS
EVERGREENS PEONIES PHLOX
and
HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY
GENEVA, N. Y.

70 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE

THE

North-Eastern Forestry Co.

CHESHIRE

...Connecticut...

A Pruning Book That Will Build Business for You



Here is a book that will help you by helping your customers.

It is a practical guide to right pruning and growing. It will tell every purchaser of your products how, when and where to prune for the most vigorous and healthy growth.

Knowing the kind of shears to get is equally as important as knowing how to use them. This book will give your customers some helpful information about shears too.

We'll Send You a Copy Free

We have a plan of co-operative selling and advertising of which "The Little Pruning Book" is an important part. It's a plan that will help you sell Nursery Stock and help us sell Pexto Pruning Shears.

You must see the book before you can appreciate the plan. It sells in book-stores for 50 cts., and believe us "It's worth sending for." Furthermore, sending for it does not obligate you in the slightest. It just gives us an opportunity to tell you about our business building plan.

Send for your free copy today.

The Peck, Stow & Wilcox Co.

2189 W. Third Street

Cleveland, Ohio



PRUNING SHEARS

J. H. Skinner & Co.

Topeka, - Kansas

Apple Seedlings

Mahaleb Seedlings

Forest Tree Seedlings—Catalpa, Elm, Maple, Mulberry, Black Locust and Honey Locust.

Fruit Trees—Apple, Cherry and Kieffer Pear. Rhubarb, Divided Roots, True Myatt's Linneaus.

Grapes

Shade Trees

Flowering Shrubs

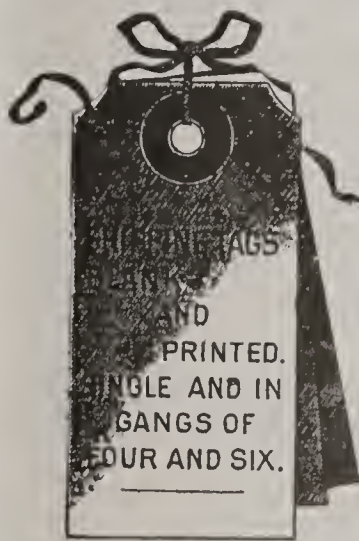
Paeonias.

HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

Rawhide Brand of Shipping Tags and Tree Labels

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.

West Chester, Pennsylvania

DO YOU NEED

SPIRAEA ANTHONY WATERER 2 to 2½ ft., and 2½ to 3 ft., bushy.

SPIRAEA THUNBERGII 2 to 2½ ft., and 2½ to 3 ft., bushy.

LONICERA TATARICA, red, white and pink 2 to 3 ft., and 3 to 4 ft.

HYDRANGEA PAN. GLAND. 2 to 3 ft., and 3 to 4 ft.

PERSIAN LILAC 2 to 3 ft., and 3 to 4 ft.

PHILADELPHUS GRANDIFLORUS, CORONARIUS and **LEM-OINEI** 2 to 3 ft., and 3 to 4 ft.

VIBURNUM PLICATUM 3 to 4 ft., and 4 to 5 ft.

WEIGELA ROSEA 4 to 5 ft.

SNOWBALL, Common 2 to 3 ft., and 3 to 4 ft.

HIGH-BUSH CRANBERRY 2 to 3 ft., and 3 to 4 ft.

Or any other shrubs. Send us a list of what you require, giving quantities and sizes, and let us quote you. It will be worth while. We have the stock.

SMALL STOCK FOR PLANTING IN NURSERY ROWS. We have it. The best ever. Did you get our price list? A postal card request will bring it to your office. Stock selling fast. Supply limited. Don't put it off and be disappointed.

Thomas B. Meehan Co.,
WHOLESALE NURSERYMEN

Dresher, - Penna.

Subscribers to "Nurserymen's Fund for Market Development."

STOCKS TO SPARE---

Out of our own importations, we
can spare a few

Pears 7-12 m-m

Plum 5-9 m-m

Manetti 5-10 m-m

on hand; immediate shipment;
F.O.B. prices. If interested, write:

John Watson & Company

NEWARK - NEW YORK
WAYNE COUNTY

MARCH FIRST

For Spring of 1918

*WE will have our usual line
of Ornamentals, Shade
Trees, Perennials, Apple,
Plum, Cherry, Peach, etc.*

C. M. Hobbs & Sons

Marion County

Bridgeport, - - Indiana

Subscribers to "Nurserymen's Fund for Market Development."

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa

Subscribers to "Nurserymen's Fund for Market Development."

LOOK FOR IT

The first of this month we issued our general wholesale trade list. Did you get your copy?

If not, a postal will bring one to your desk. There are lots of interesting offerings in this list and every nursery buyer should have a copy at hand; 24 full pages pricing complete assortment for you to choose your shorts and wants from.

Write today if you cannot locate your copy.

SHENANDOAH NURSERIES

D. S. LAKE, Pres.

SHENANDOAH, IOWA

Subscribers to "Nurserymen's Fund for Market Development."

American Sweet Chestnut American Elm

We have a surplus of the above seedlings in sizes from twelve inches to five feet. We will not turn down a reasonable offer for them.

We carry a general assortment of Forest Tree Seedlings, Evergreens and Shrubbery.

Ask for price list.

J. JENKINS & SON

WINONA, COL. CO.

OHIO



BERRY'S Wholesale Nursery

Small fruit plants in variety; rhubarb; horseradish; California Privet; Barberry Thunbergii; Hydrangea P. G.; Spiraea Van Houghti; Peonies, etc.

See list before placing your order.



P. D. BERRY

Dayton

Ohio

The Best In Nursery Products

We carry a full line of fruit and ornamental trees, evergreens, shrubs, etc. Send us a list of your wants.

A FEW SPECIALS

Oriental Planes from 1¼ to 3 inch caliper. A large stock of Sugar Maples, American Elms, Beech grafted River's, and Fern-leaved, Double Flowering Japan Cherries, Prunus Pissardi, Flowering Apples, Flowering Peaches, Magnolia Tripetela, Japan and American Judas, Japan Walnuts, American Arbor Vitae, Hemlock and Norway Spruce, Altheas, Forsythias, Philadelphus, Viburnum Plicatum, Weigela, Eva Rathke, etc.

Downing Gooseberries, 2 years No. 1.

HOOPES BRO. & THOMAS COMPANY

THE WEST CHESTER NURSERIES

Established 1853

West Chester, Pa.

Incorporated 1907

Subscribers to "Nurserymen's Fund for Market Development."

FRAMINGHAM QUALITY NURSERY STOCK

for

YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Our spring trade list is ready. Have you a copy?

If you have not reserved your share of Framingham Quality stock, act now.

Framingham Nurseries
FRAMINGHAM
MASS.

REMEMBER!

If its a hardy perennial or so called old fashion flower worth growing, we have it in one shape and another the year round. We have the largest stock in this country, all Made in America, and our prices—

Why say more here. Send for our Wholesale price list of varieties and benefit from the opportunities this affords you.

Our motto: "Maximum Quality, Minimum Cost."

Address, R. W. Clucas, Mgr.
Palisades Nurseries, Inc. Sparkill, N. Y.

Vincennes Nurseries, W. C. REED, Prop.
VINCENNES, - - INDIANA

Prepare for Spring by securing the best Cherry to be found. Our blocks of Cherry are the largest in the U. S. and quality the best. While the U Boats have been sending Mahlebs to the bottom the past two years, we have been fortunate in securing our usual supply and will have a splendid lot of trees to offer in the following:

CHERRY TWO YEAR general list of varieties

CHERRY ONE YEAR 11-16 up Sweets and Sours

PEACH ONE YEAR leading varieties

PLUM Japans, European and Hansen Hybrids

COMPASS Cherry and Apricots

APPLE leading varieties in connection with other stock only

Grafted English Walnuts and Northern Pecans

Special prices to car lot buyers on large orders

Subscribers to "Nurserymen's Fund for Market Development."

We are now ready to quote lowest prices on
FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries
Sparta, Ky.

For FUMIGATION With
HYDROCYANIC ACID GAS
"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock. Plants under glass and in Greenhouses.

Manufactured in U. S. A. by

The Roessler & Hasslacher Chemical Co.
100 William St. - - New York, N. Y.

You can save Time and Money

If you use our neatly packed

SHEET NURSERY BURLAP

Put up in bales

In various size sheets ranging in sizes from 24x24 to 40x40 in.

Write for particulars

Sarachan & Rosenthal
64-66 Hanover Street
Rochester, - - New York

FAIRFIELD NURSERIES FRUIT AND SEED FARMS

OFFER for Spring 1918

GRAPE VINES—One and two years old. Varieties largely Moore's Early, Concord and Niagara.

Also Scarlet or Crimson Clover Seed and Cow Peas. Free from weed seeds, all recleaned and guaranteed first class.

Correspondence solicited. Price list upon request.

CHAS. M. PETERS

P. O. Address, Salisbury, Wicomico County, Md., R. F. D. 3

Long Distance Phone and Telegraph, Salisbury, Md.

THE WESTMINSTER NURSERY J. E. Stoner, Prop.

WESTMINSTER - - MARYLAND

The kind that give satisfaction

200,000 CALIFORNIA PRIVET, 1 year and 2 year

1/2 million ASPARAGUS, 2 year and 3 year

DOWNING GOOSEBERRY PLANTS, 2 year

BARBERRY THUNBERGI, 2 and 3 year transplanted

Can supply the above stock in car load lots or less, also, have a large stock of Rhubarb, Cumberland Raspberry Plants, Spireas, Deutzia Assorted, nice specimen plants. Evergreens, Horse Chestnut, N. Maple, Lombardy Poplar and Planes, etc.

We will make attractive low prices for early orders
Send List of Wants

HEAVY SHRUBS

ARALIA PENTAPHYLLA ... 3 to 5 ft.

BERBERIS THUNBERGI ... 18 to 24 in.

BERBERIS THUNBERGI ... 2 to 3 ft.

FORSYTHIA VIRIDISSIMA . 4 to 5 ft.

SPIREA OPULIFOLIA 4 to 6 ft.

" " AUREA 4 to 6 ft.

" VAN HOUTTEI 2 to 3 ft. 4 to 5 ft.

WEIGELA ROSEA 4 to 5 ft. 5 to 6 ft.

LONICERA TARTARICA ... 3 to 4 ft. 4 to 5 ft.

TSUGA CANADENSIS 4 to 5 ft. 6 to 8 ft.

ROBIN HILL NURSERY

GEORGE B. WRIGHT, Prop.

CHELMSFORD - - MASS.

For Spring 1918

We offer a Complete
List of

Shade Trees, Shrubs, Evergreens

WILL BE PLEASED TO
SUBMIT PRICES

AUDUBON Nursery, P.O. Box 731, Wilmington, N. C.



3's For Nursery Planting

FIELD-GROWN OWN-ROOT ROSES

Choice assortment, mostly H. T.'s

Let us book now. Send want list for prices. Also get our prices on 1's and 2's for immediate express shipments.

Howard Rose Co., Hemet, Cal.

TREE SEED

Large assortment of Tree, Shrub and Fruit Seeds for ornamental and forestry purposes. Send for catalogue. **CONYERS B. FLEU, Jr.**

Germantown, Philadelphia, Pa.

AMERICAN FLORIST'S TRADE DIRECTORY

Price \$3.00, Postpaid

For Sale By

NATIONAL NURSEYMAN PUB. CO. Inc.,
HATBORO, - - - PA.

Soft Maples!



20 Car loads of extra heavy trees

Prompt Shipment

Write us

H. F. Hillenmyer and Sons

Lexington, - Kentucky

Subscribers to "Nurserymen's Fund for Market Development."



Unusual and rare stock in great variety; hardy Bamboos, Palms, Crapemyrtles, fruit and Economic trees and plants, etc., etc., from all over the world.

New additions constantly being tested. Ask for complete descriptive catalog, and wholesale rates. 34th year.

REASONER BROS.,

ONECO

FLORIDA.

PRINTING

Catalogues
Stationery
Business Forms



**The Robinson
Publishing Co.**
Hatboro, Pa.

Specialists in Nursery Printing

Ask for Prices.

We are the printers of this Magazine

P. OUWERKERK,

No. 216 Jane St., Weehawken Heights, Hoboken, N. J.

Rhododendrons, Clematis, H. P. Roses, Hardy Azaleas, Paeonies, Magnolias, Box Trees, Fancy Conifers, Hydrangeas and Shrubs, our specialties at our **HOLLAND NURSERIES**. Some of the goods on hand here during the packing season.

WE OFFER

Grape Vines, Currants and Gooseberries
in all varieties and grades, also

Grape and Currant Cuttings and Light Grade of Vines for
Lining Out in Nursery Rows

WRITE FOR PRICES

F. E. Schifferli,

-

Fredonia, N. Y.

Spring price-list to the trade only.

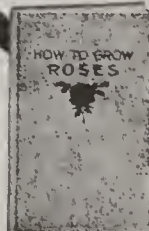
2 1/4 and 4-inch pot-grown in 400 best sorts.

2-year-old field-grown in Hardy Climbers.

ROSES

THE LEEDLE FLORAL COMPANY
SPRINGFIELD-OHIO.

Sell This New Rose Book To Your Customers 100% Profit For You



It is an invaluable working manual for rose lovers. Tells where, when and how to plant them most resultfully. Gives helpful pointers on such vital subjects as "Protection for Winter," "Pruning," etc. Indexes nearly 600 varieties for ready reference. Gives short suggestive lists for use in every imaginable place and for every conceivable purpose. Is profusely illustrated throughout its 121 pages. 16 pages in full color. Is neatly bound in cloth.

Your customers will want a copy of this Rose Book.

You can sell it to them and make 100% profit on every copy you sell.

We sell it to you for 50c a copy.

You sell it to them for \$1.00 a copy.

Now is just the time when folks' minds are beginning to turn gardenward again.

Now is just the time, then, when the Rose Book sells best—when folks have the most time and greatest inclination to read such things.

Send for a trial lot of these sure-fire money-makers today, and let them make money for you.

We'll gladly send you further terms and a copy of the book if you so desire.

The Conard & Jones Co.
West Grove, Pa.

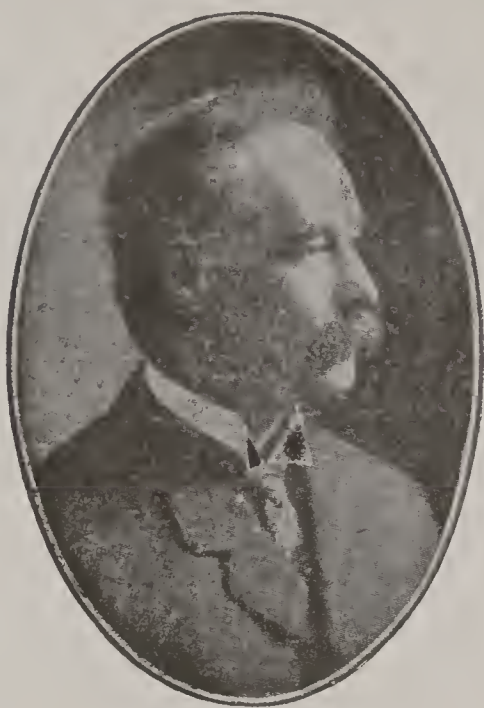
Subscribers to "Nurserymen's Fund for Market Development."

EVERBEARING STRAWBERRY PLANTS

If you need Everbearing strawberry plants to fill spring orders or if you wish to increase your planting in nurseries, we can supply you with genuine **PROGRESSIVE** Everbearing plants, guaranteed to be **TRUE TO NAME** and handled so as to reach you in best of growing condition. Write for prices.

We have been growing and breeding the Everbearing strawberries for the past eight years and have many new varieties growing in our experimental grounds that are not yet for sale. We invite a personal visit to our grounds during fruiting season, preferably during August or September. The latch string is always out.

THE GARDNER NURSERY CO., Drawer 103, Osage, Iowa.



Not that I think I am good looking but lots of folks want to see what the man looks like with whom they do business. Well, here I am. I haven't changed much since the days when I used to do everything myself—attend to correspondence in the evening and dig and pack orders during the day—all myself, with the help of one hired man. My Evergreen business has grown, but my business policy remains the same, and that is: Give every customer complete satisfaction.

D. HILL.

Hill's Evergreens

SINCE 1855

Many Nurserymen are pushing the Evergreen feature of their business with increasingly profitable results. But it takes time to grow Evergreens to a marketable size. To have a line of good salable stock three or four years hence, you must start now—this Spring. Let us figure with you on your requirements now. Send us your want list for pricing. Ask any questions you want.

Our great specialty for over half a century has been the propagating of evergreens for selling to the nursery trade of this country. Put us to work propagating **your** Evergreens. You will save time, money and temper if you do, for **American grown Evergreen stock** means a lot these strenuous days.

We have, in addition to a particularly favorable, natural situation, the most up-to-date facilities, equipment and skilled workmen obtainable. Here is a partial list of the leading varieties. Write for prices and information.

Abies Balsamea (Balsam Fir)
Abies Tsuga Canadensis (Hemlock)
Abies Concolor (Concolor Fir)
Abies Douglassi (Douglas Fir)
Abies Nordmanniana (Nordman's Silver Fir)
Buxus Sempervirens (Bush Shaped Boxwood)
Buxus Suffruticosa (Dwarf Edging)
Cedrus Atlantica (Atlantic Cedar)
Juniperus Canadensis (Dwarf Juniper)
Juniperus Canadensis Aurea (Gold. Dwf. Juniper)
Juniperus Counarti (Counarti Juniper)
Juniperus Elegantissima Lee (Lee's Gold. Juniper)
Juniperus Glauca (Silver Cedar)
Juniperus Hibernica (Irish Juniper)
Juniper Pfitzeriana (Pfitzer's Juniper)
Juniperus Procumbens (Japanese Trailing Juniper)
Juniperus Sabina (Savin Juniper)
Juniperus Sabina Tamariscifolia (Gray Carpet Jun.)
Juniperus Schottii (Schottii Juniper)
Juniperus Virginiana (Red Cedar)
Larix Europea (European Larch)
Picea Alba (White Spruce)
Picea Canadensis (Black Hill Spruce)
Picea Excelsa (Norway Spruce)

Picea Pungens (Colorado Blue Spruce)
Picea Pungens Kosteriana (Grafted Blue Spruce)
Pinus Austriaca (Austrian Pine)
Pinus Banksiana (Jack Pine)
Pinus Flexilis (Limber Pine)
Pinus Mugho (Dwarf Mugho Pine)
Pinus Ponderosa (Bull Pine)
Pinus Resinosa (Red or Norway Pine)
Pinus Strobus (White Pine)
Pinus Sylvestris (Scotch Pine)
Taxus Baccata (English Yew)
Taxus Canadensis (American Yew)
Taxus Cuspidata (Japanese Yew)
Taxus Cuspidata Brev. (Dwf. Japanese Yew)
Taxus Repandens
Thuya Ellwangeriana (Tom Thumb Arbor Vitae)
Thuya Globosa (Globe Arbor Vitae)
Thuya Hoveyi (Hovey's Golden Arbor Vitae)
Thuya Lutea (Peabody's Golden Arbor Vitae)
Thuya Occidentalis (American Arbor Vitae)
Thuya Orientalis (Chinese Arbor Vitae)
Thuya Pyramidalis (Pyramidal Arbor Vitae)
Thuya Wareana (Siberian Arbor Vitae)
Thuya Woodwardi (Woodward's Globe)

We also have a complete line of young Deciduous Trees and Shrubs, Forest tree seedlings, etc., for lining out.—Write for complete wholesale trade list.

THE D. HILL NURSERY CO., Inc.



EVERGREEN SPECIALISTS
LARGEST GROWERS IN AMERICA

Dundee, Illinois

BOX 401



We extend a cordial invitation to every member of the trade to visit us at any time. Will try to make your visit interesting and show you a good welcome. Our Nurseries are only 42 miles from Chicago and are conveniently reached by Interurban.

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK
The National Nurseryman Publishing Co., Incorporated

Vol. XXVI.

HATBORO, PENNA. APRIL, 1918

No. 4

LAWN SPECIMENS

In previous issues we illustrated the Ginkgo and the Weeping Beech as lawn specimens. To these we now add the Silver Leaved Linden, *Tilia argentea*. These make a trio that are hard to beat. They are all so differ-

ent in habit and contrast splendidly with each other. The texture and color of the foliage is also very different.

The low-branched tree such as our illustration is not always desirable for a small lawn, but where there is



Silver Leaved Linden, Tilia argentea grown as a lawn specimen.

room to show off their beauty they are always to be preferred to the high branched ones that are apt to be so stereotyped and monotonous in appearance.

The lindens like a cool moist climate but the *Tilia argentea* (tomentosa) will stand drouth and heat better than any of them and is to be preferred on this account. It is a native of central Europe, being a common forest tree of Hungary.

It is quick growing and attains large proportions and when grown in high branched form makes a dense round-topped head.

The leaves are dark green above and silvery white beneath so that when stirred by the breeze give a very pleasing effect.

THE WEEK'S BILL

March 19, 1918.

To the Nurserymen of Pennsylvania:—

It seems desirable at this time for me to make a brief statement relative to the present status of the Weeks Bill, which was introduced into Congress early in January, and which proposed the immediate exclusion of all foreign importations after July 1st, 1918.

I consider it unfortunate, indeed, that this bill has been introduced in its present form, because it is decidedly unfair to our propagating nurserymen to cut off at once all supplies on which nurserymen and propagators have been dependent. It has constantly been my aim, although favoring ultimate embargo on the majority of foreign plant importations, to secure a reasonable amount of time in which the nurserymen could secure necessary plant for continuing propagation in this country, without seriously interrupting their flow of business.

On my recent trip to Washington I was glad to learn that this bill will not receive consideration at the hands of the committee this session, and probably will be permanently pigeonholed, at least in its present form. It seems desirable just at this time that very careful consideration be given to this question, and there is a possibility that the Federal Horticultural Board may hold a hearing about the middle of May relative to the plant exclusion question.

Yours very truly,

J. G. SANDERS, *Economic Zoologist*.

A MID-WEST HORTICULTURAL EXPOSITION

A Mid-West Horticultural Exposition is being planned for the first week in November, running from the 4th to the 9th inclusive. The plans for the Exposition have been definitely launched and are under the auspices and direction of the Iowa State Horticultural Society and the Iowa Agricultural College. The Exposition is also being backed by the Nurserymen's Association, Fruit Growers, Garden Clubs, etc. It is planned to be representative of all the states in the Ohio, Mississippi River and Missouri River Valleys.

F. J. Wright, Des Moines, Iowa, is chairman of the Committee on Commercial Exhibits, and all those who plan to have exhibit space should get in touch with him.

Camp Lee, Virginia, February 19th, 1918.

To the Vice-President and Executive Committee of the
AMERICAN ASSOCIATION OF NURSERYMEN:

Gentlemen:—

On the 15th of last August, after being commissioned a Major in the U. S. Field Artillery and receiving orders for immediate service, I telegraphed my resignation as President of the American Association of Nurserymen, to you through your Secretary.

Some time thereafter I was notified by our esteemed Vice-President that the Executive Committee had decided not to accept my resignation and that I would retain the office of President during my absence.

Much as I appreciate this great honor I could not help feeling that it was not for the best interests of the Association, and so stated at the time. It does not seem wise to have any one of the offices of the Association filled by an inactive or absent official.

Also, conditions have materially changed and a long-drawn-out war seems inevitable. The problems that confront the American Association of Nurserymen are greater now than at any time in its history. New crises are constantly arising to tax to the uttermost all the genius the Association can muster. It is therefore most necessary that no offices be filled by inactive officers.

As I am now, in addition to my regular military duties, conducting a night school for Artillery Officers and a special intensive training course, it is physically impossible for me to keep in touch with Association matters. I therefore feel that it is only right and proper for me to ask the Executive Committee to reconsider its action and accept my resignation as previously submitted.

With sincerest appreciation for your continued confidence, and the honor you have paid me and the service to which I now belong, I am

Most sincerely yours,

LLOYD C. STARK, *Major 315th Field Artillery*.

SPRAYING FOR PROFIT

There are a great many books on the subject of spraying. Most of them treat the subject at too great length for the average man who has only a small garden or grounds. A copy of the 22nd edition of "Spraying for Profit," a little work that was published eighteen years ago, but entirely rewritten last August, has come to our desk. The fact that two hundred and fifty thousand copies of this work have been issued is sufficient guarantee of its popularity. The fact that it is small, terse, and just gives the information that is wanted in simple language perhaps accounts for its popularity. It is worth investigating by every nurseryman as a book not only for himself but one which he might distribute to an advantage among his customers.

The author is Howard Evarts Weed, Landscape Architect, Beaverton, Oregon. Mr. Weed in calling our attention to the book states "if any nurseryman is especially interested I should be pleased to give him a copy with my compliments upon a request for the same."

Reminiscences of a Nursery Salesman

THERE used to be a whole lot of controversy among we youngsters in the potting shed as to whether a practical grower ever made a good salesman. Those taking the negative side were usually in the majority, but there was always sufficient instances quoted to prove the exception to the rule.

It was invariably claimed a good grower knew too much about the plants and rarely had the commercial instinct sufficiently developed. While this is very often true, his failure to make a good salesman does not come from having a practical knowledge of the goods he tries to sell but in spite of it.

I always prided myself on being a practical grower, gardener or horticulturist, whichever you may wish to call it, having started in as pot boy and working through the various phases of the profession on private estates, commercial nurseries and florists' establishments. Towards the latter end of my experience, I naturally gravitated into selling.

While I do not claim to be anything more than an average of those who hold down their jobs for a number of years, without getting fired, and do not hold remarkable records you hear about in the hotel lobby and potting shed, but rarely come in contact with, it was always an interesting game, although not a money maker.

My first experience along this line was in a florist's establishment that did both a wholesale and retail business. Having charge of the range of houses adjoining the offices, I was very handy when customers called and gravitated into selling. There were many times, when work was pressing, the appearance of a customer was about as welcome as a frost in June.

There was one old lady especially who "just loved flowers" and who would spend about an hour selecting a fifty cent plant, who always seemed to come at the most inconvenient time. I am fairly sure the boss would have approved even a little discourteous treatment to such an unprofitable customer, but somehow she was such a perfect lady and evidently so innocent of wrong intent that my patience held out.

The results may sound very much like the story books with a moral, but are true nevertheless.

One Sunday morning a gentleman came to the greenhouses and bought two dozen mums at \$2 per dozen, and while I was wrapping them up asked if my name was not John Doe. When told that it was he said: "Mrs. B. has told me about you. She is a friend of my wife's. Here is my card. If you would like to go in business for yourself, I will advance you all the money you need." The man proved to have a millionaire's rating.

Since that time I have never had reason to change my mind that the most insignificant customer or prospect is worth every consideration you can give it. You never can tell where they will lead to.

From that time on it seemed as if "selling" was my fate, rather than growing.

Judging from my own experience the very best asset a salesman can have is a thorough knowledge of his goods. If he is selling nursery stock, it may not be necessary but it is an advantage to know the plants by the Latin name, the common name, where they come from, how to prune, plant, in fact, he cannot know too much. He will find his knowledge will often be the means of getting an order or making a friend.

In selling the retail trade, the most difficult part is getting in touch with the prospect. An experience in this line I had in Akron illustrates the point. A very large place with some very fine specimen trees and plenty of room for more seemed to be worth a call. After looking up the gardener, who proved to be a foreigner who could barely speak English, I found it would be necessary to see the proprietor to do business. Going to the door I presented my card, requesting an interview. The lady very nicely told me that they did not wish to purchase.

This information, of course, was accepted without any attempt at argument, and as gracefully as possible. Upon leaving I took the opportunity of complimenting her on a fine specimen *Koelreuteria* growing on the lawn, and gave a little information about it. This led to talk on other trees, and "Oh, by the way if you can spare the time," which I most certainly could, "I would like you to see my husband. We have a tree which we have never been able to find the name of. A tree doctor told us it was a *Crataegus*."

The tree proved to be a nice specimen English Cork Maple, *Acer campestre*. It was easy to prove the "Doctor" wrong by telling them it bore winged seeds and not berries like the *Crataegus*.

The net results of knowing your goods on that call, were a nice order by showing where and telling what they should plant, and what was far better, an introduction to the best prospects in town, for the gentleman took me in his machine and personally introduced me.

On another occasion I crossed the trail of a tree agent, who was either supremely ignorant of the stock he was selling or there was a bad mix-up in filling his order. The lady received me in anything but a gracious manner, in fact, I think she had serious thoughts of calling in the police. At any rate I got the scolding that was due my predecessor. It was plainly evident it would be waste of time to try and sell or to argue I was honest, or that my house was more reliable. She was convinced nursery agents were frauds, and this was the longed for opportunity to tell them so.

While listening to the tirade it was an easy matter to pull out a long-handled budding knife and cut the string that was cutting into the bark of a tree growing near, and ask for another piece to retie it, then to get talking about roses, with a few instructions how to prune them and why, and to call attention to scale on the lilac bushes and suggest a few plants for along the porch. Interest

succeeded anger and just as I was about to leave, she said,

"But if I gave you an order how do I know that you will treat me any better than the other man?" "That is a very simple matter, you will know these plants when you see them. I will have them shipped to you and you don't need to pay for them until you get the goods and the invoice. I will trust you."

Today that lady would buy anything I suggested. In fact, I refuse to sell plants that she thinks she wants because I know they would not be suitable for her grounds, but there is not a new house goes up, or a prospect develops in that town that she does not advise me of it, and being an enthusiastic gardener she has many friends to whom I have been recommended.

Practical knowledge does help the salesman.

(To be continued)

THE STARK LAWSUIT

The United States District Court for the Southwestern Division of the Western District of Missouri, has granted a sweeping injunction against the William P. Stark Nurseries, enjoining them from the use of the trade-mark and from using the address "Stark City" in their advertising.

They are also enjoined from using the word "Stark" in such manner as will not unmistakably differentiate their goods and advertisements from the original Stark Brothers Nurseries.

All the profits of the William P. Stark nurseries during the period of infringement of trade-mark, beginning with March 11, 1914, are to be paid to the Stark Brothers, damages also are to be awarded to the Stark Brothers.

In summing up the case the court stated:

"While it may not be true that any single nurseryman may claim the exclusive privilege of propagating and exploiting this apple (Delicious) upon the market, nevertheless, read in connection with the known history thereof, the language quoted is obviously intended and calculated to confuse the public respecting the identity of these rival nurseries.

"William P. Stark claims to have been the representative of complainant, through whom this fruit was originally acquired. This is denied by complainant. He further claims to have named the fruit because of its flavor and the impression made upon him when he first tasted it. It is undoubtedly true that at that time this defendant was one of the active members and an officer of the complainant corporation. His position is that he is a Stark, and that he was actively engaged in the operations which built the reputation of the Stark name in the nursery business. Conceding all this to be true, nevertheless it cannot be denied that whatever he may have accomplished in this regard was as a representative of the complainant corporation, in its name, and for its benefit, as one of others of that family and corporation similarly engaged. He cannot now draw to himself individual credit therefor to the extent of invading the property rights of complainant and of substituting himself for complainant to the confusion of the public. He may not be denied the

legitimate use of his name in business.

1. "He may not affirmatively do anything to cause the public to believe that his article is made by the first manufacturer.
2. "He must exercise reasonable care to prevent the public from so believing.
3. "He must exercise reasonable care to prevent the public from believing that he is the successor in business of the first manufacturer."

IN THE DISTRICT COURT OF THE UNITED STATES FOR
THE SOUTHWESTERN DIVISION OF THE WESTERN
DISTRICT OF MISSOURI.

Stark Bros. Nurseries & Orchards Company, Complainant
vs.

William P. Stark and William H. Stark, Trustees
Doing business under the name and style of
William P. Stark Nurseries, Defendant
In Equity No. 18
D E C R E E

This cause having come on to be heard upon the pleadings and proofs, and counsel for the respective parties having been heard, and the court being fully advised in the premises, now, upon consideration thereof

IT IS ORDERED, ADJUDGED AND DECREED that the name "Stark Trees" has been a trademark upon fruit trees and nursery products for twenty-five years last past; that on June 24, 1913, said trade-mark was duly registered under the ten-year clause of the Act of Congress of February 20, 1905, in the United States Patent Office, and is a valid and subsisting trade-mark under said Act of Congress.

That the complainant Stark Bros. Nurseries & Orchards Company is, and ever since the year 1891 has been, the exclusive owner of said trade-mark, during all said time has carried on the business at the City of Louisiana in the State of Missouri, of propagating, growing and selling fruit and nursery stock, and during all said time has used upon the boxes and packages containing said fruit trees grown and sold by it a label or stamp bearing the words "Stark Trees" as a trade-mark.

That the defendants herein, William P. Stark and William H. Stark, Trustees, doing business under the name and style of William P. Stark Nurseries, have infringed upon the said trade-mark, and upon the exclusive rights of the complainant under the same, by selling prior to and since the commencement of this suit fruit trees and nursery stock, to which parcels and packages containing the same said defendants have attached a tag or label bearing in conspicuous printed letters the words "Nursery to Orchard. William P. Stark Nurseries, Stark City, Mo." together with the picture of a tree, said name "Stark" being prominently printed across the picture of the tree, thus plainly suggesting the term "Stark Trees;" that said label was widely exploited by said defendants in extensive advertising, all in imitation and infringement of the trade-mark "Stark Trees," as charged in the bill of complaint.

That during a period prior to the actual stating of the nursery now conducted by defendants the complainant had widely featured in its advertising matter the addresses "Stark, Mo.," "Starkdale, Mo." and "Stark Station, Mo.," all of which was well known to said defendants; that said defendants caused the name of the post office of the town of Chester, Missouri to be changed to Stark City, Missouri, adopted Stark City as an address and extensively advertised said address in their literature and in connection with their business with the intention of misleading the public into the belief that defendants' nursery was that of the original Stark Nursery Company; by such action defendants intended to and did mislead the public, and intended to and did gain an unfair advantage in trade to the injury of the prestige and business of the complainant company.

IT IS FURTHER ORDERED, ADJUDGED AND DECREED that by reason of their infringement of said trade-mark "Stark Trees," and by reason of their wrongful use of the name "Stark" and the address "Stark City," the complainant do recover of the defendants William P. Stark, William H. Stark and the William P. Stark Nurseries all gains and profits which said William P. Stark, Wil-

William H. Stark and the William P. Stark Nurseries have derived, received or made during the period within which complainant's said trade-mark is shown to have been infringed beginning with the 11th day of March, 1914, and that said complainant do also recover from said William P. Stark, William H. Stark and the William P. Stark Nurseries any and all damages which complainant has sustained by reason of defendants' infringement and unfair competition from and after the 26th day of August, 1916, on which date complainant gave notice to defendants of the registration of its said trade-mark.

This cause is hereby referred to George A. Neal, Esq., of Kansas City, Missouri, as Master of this court to take and state the accounting of said gains and profits, and to assess such damages and report thereon with all convenient speed, and said defendants are hereby directed and required to attend before said Master by its officers, partners, agents and employees from time to time as required, and to produce before him such books, papers and documents as relate to the matter at issue, and to submit to such oral examination as the Master may require.

Said Master, in the taking of said accounting and ascertaining said damages, may, if he finds it reasonably necessary so to do, employ an expert certified accountant to assist him in taking said accounting and determining said damages, and may further employ a stenographer to take down the evidence, or any part thereof, that may be submitted in this cause and afterwards transcribe the same, and all reasonable costs and expenses incurred by said Master in the premises shall be taxed as costs against said defendants and recovered as other costs that are authorized to be paid by defendants.

IT IS FURTHER ORDERED, ADJUDGED AND DECREED that a perpetual injunction issue out of and under seal of this court enjoining and restraining the defendants William P. Stark and William H. Stark, as trustees or individually, and the William P. Stark Nurseries; their officers, clerks, attorneys, agents, servants, workmen, and all persons claiming or holding under or through them, from the direct or indirect use of the infringing label charged or any colorable imitation of complainant's trade-mark in suit, from putting the word "Stark" prominently at the top of its labels, or elsewhere in connection with the business of producing, advertising and selling nursery stock, in such manner as will not unmistakably differentiate their goods and advertisements from those of the complainant's, and from using the name or address "Stark City" upon their labels or tags attached to nursery stock or packages containing the same or from using the address "Stark City" in advertising their business and wares.

IT IS FURTHER ORDERED, ADJUDGED AND DECREED that the complainant recover of the defendants its costs of this action, taxed in the sum of Dollars.

Kansas City, Missouri, February, 1918.

..... Judge.

THE PAST SEVERE WINTER

As the season advances, the damage done to evergreens, trees and shrubs during the past severe winter becomes more apparent. English Ivy on the walls of buildings, which in previous winters came through in fairly good green color, this year is quite brown and dead as far south as Baltimore at least. Hemlocks are severely singed, and Boxwood especially in the clipped, pyramid and standard forms that were growing in exposed positions suffered severely, many being killed outright. In many locations Blue Spruce, Concolor Fir have been badly browned. At this writing it is a little early to judge the damage done to Privet hedges, but it is evident many of them have been killed to the ground.

Due to the covering of snow, tender roses and herbaceous perennial plants do not seem to have suffered quite so much.

The nurseryman doing a local business and able to deliver his goods by truck is the fortunate one during these days of embargoes.

NEW YORK STATE NURSERYMEN'S ASSOCIATION

At a meeting of the New York State Nurserymen's Association, held at the Chamber of Commerce, Rochester, New York, March 5th, the following officers were elected:

President—C. H. Perkins, 2nd, Newark, N. Y.

Vice President—J. M. Pitkin, Newark, N. Y.

Maxwell Sweet, Dansville, N. Y.

F. A. Guernsey, Schoharie, N. Y.

T. J. Smith, Geneva, N. Y.

W. L. Hart, Fredonia, N. Y.

Sec'y-Treas.—Horace Hooker, Rochester, N. Y.

Executive Committee—John P. Rice, Geneva, N. Y.

Irving Rouse, Rochester, N. Y.

F. M. Hartman, Dansville, N. Y.

The following resolution was adopted:

RESOLVED:

That the New York State Nurserymen's Association desires to express its appreciation to Mr. Curtis Nye Smith, Secretary of the American Association of Nurserymen, for his untiring efforts to secure satisfactory ruling regarding the transportation of nursery stock, and to congratulate him on the results obtained—That a copy of this resolution be sent to Mr. Smith and to the two trade papers.—Adopted.

March 2, 1918.

TO NON-RESIDENT NURSERYMEN SELLING STOCK IN WISCONSIN

Gentlemen:

The nurserymen of Wisconsin are required to grade their apple trees and other nursery stock free from crown gall and hairy-root. A special packing house inspection is made in the fall for this purpose.

Under a recent amendment to the inspection law it is now possible to enforce the same requirement in regard to the stock shipped into the state from outside sources. All non-resident nurseries will consequently be expected to comply with this regulation beginning with the present season. Fortunately, many are already doing so.

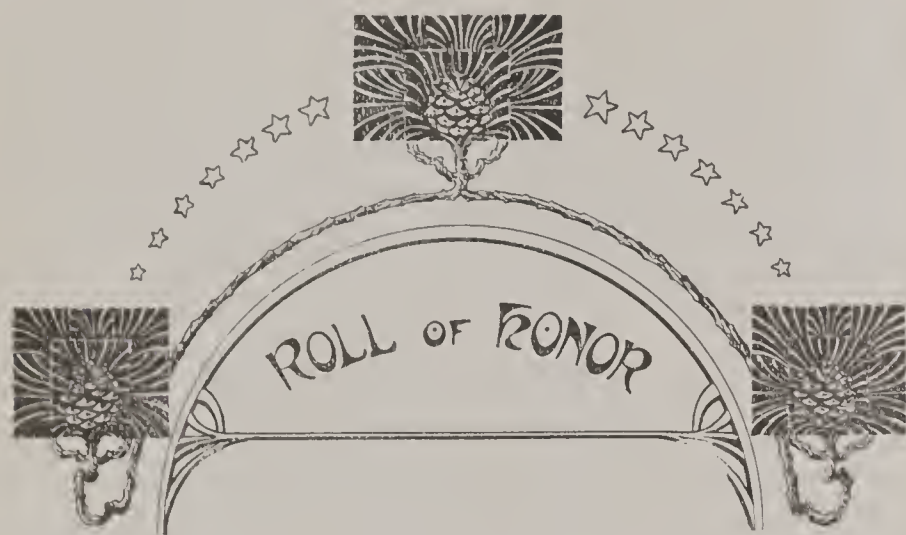
It is manifestly unfair to destroy large quantities of infected Wisconsin stock and permit outside trees with the same disease to enter the state freely.

Dr. Fraeker has shown in the Journal of Economic Entomology for February, 1918 that a pronounced reduction in size and quality of apple stock results from infection with this disease. The injury was found to occur on all varieties examined, varying from 15% to 25% in amount. In other words, the presence of crown gall is causing nurseries a heavy loss by lowering the quality of their stock. Every effort to reduce the prevalence of the disease would benefit them materially by increasing the value of their product.

A majority of the nurseries shipping into Wisconsin at the present time are delivering a very high grade of stock, and we trust that the remainder will find it profitable to improve the quality of their shipments in this respect.

Very truly yours,

E. D. BALL, *State Entomologist.*



IT is the purpose of the National Nurseryman to publish a roll of honor consisting of the names of those nurserymen serving in the United States army in the present war. We shall appreciate it if our readers will send us their names and photographs if possible.

Albert G. Allen. Cadet, Flying Squadron, Park Field, Memphis, Tennessee. Member of firm of W. F. Allen Company, Salisbury, Maryland.

Howard E. Andrews, U. S. Signal Corps, France—Landscape Department, A. W. Smith Co., Pittsburgh, Pa.

Carroll A. Bagby, Capt. U. S. Infantry—New Haven Nurseries, New Haven, Mo.

Harold J. Bagby, Enlisted Medical Reserve Corps—New Haven Nurseries, New Haven, Mo.

Lew. W. Bagby, Lieutenant (Junior Grade) U. S. Navy—New Haven Nurseries, New Haven, Mo.

Oliver W. Bagby, Lieutenant, U. S. Navy—New Haven Nurseries, New Haven, Mo.

Ralph B. Bagby, Lieutenant 21st U. S. F. A., Fort Riley, Kansas—New Haven Nurseries, New Haven, Mo.

Robert E. Bagby, Cadet, Senior Class, United States Military Academy—New Haven Nurseries, New Haven, Mo.

Marvin T. Carter, Royal Palm Nurseries, Oneco, Florida.

William B. Carter, Royal Palm Nurseries, Oneco, Florida.

John H. Chattin, Aviation Section of the Signal Reserve Corps, San Antonio, Texas. Secretary and Treasurer of the Winchester Nursery Company, Winchester, Tenn.

David Collins, Royal Palm Nurseries, Oneco, Florida.

Rupert K. Courtoy, Royal Palm Nurseries, Oneco, Florida.

Harold C. Cowell, 224th Aero Squadron, Kelly Field, San Antonio, Texas. Swan River Nurseries, Patchogue, L. I., N. Y.

Bethel Drymon, Royal Palm Nurseries, Oneco, Florida.

Clinton Drymon, Royal Palm Nurseries, Oneco, Florida.

R. E. Drymon, Royal Palm Nurseries, Oneco, Florida.

William B. Drymon, Royal Palm Nurseries, Oneco, Florida.

William Flemer, Jr., Private U. S. Expeditionary Force, Ambulance Corps, Battalion No. 23, Section No. 23, France. F. & F. Nurseries, Springfield, N. J.

Clarence J. Galligan, 2nd Co., U. S. C. A., Fort Adams, R. I.—The Elm City Nursery Co.

Dean Grauer, Royal Palm Nurseries, Oneco, Florida.

Ralph Griswold, Royal Palm Nurseries, Oneco, Florida.

Melvin Head, Royal Palm Nurseries, Oneco, Florida.

Stout Hill, Royal Palm Nurseries, Oneco, Florida.

John B. Hinson, Royal Palm Nurseries, Oneco, Florida.

David L. Hires, Royal Palm Nurseries, Oneco, Florida.

Edwin Hoyt, 1st Lieutenant of the Field Artillery, Officers' Reserve Corps, now stationed at Camp Grant, Rockford, Ill.—The Stephen Hoyt's Sons Co., Inc., New Canaan, Conn.

Jackson & Perkins Co., of Newark, N. Y., have hung out a service flag with four stars in it. The stars represent: P. V. Fortmiller, Ordnance Department, Washington.

Loren G. Olmstead, Sergeant, Camp Gordon, Ga.

Clarence G. Perkins, Naval Radio School, Newport, R. I.

Stuart Perkins, Chief Petty Officer, Naval Aeronautic Station, Miami, Fla.

Thomas Jones, Royal Palm Nurseries, Oneco, Florida.

Henry Edward Kelley, 1st Lieutenant, Company C. 165 Infantry, American Expeditionary Force, now in France.—The Stephen Hoyt's Sons Co., Inc., New Canaan, Conn.

William P. Langdon, Third Officers' Training Camp, Yaphank, N. Y.—The Elm City Nursery Co.

Lee Lesley, Royal Palm Nurseries, Oneco, Florida.

Robert J. McCarthy, Sergeant, 101st Machine Gun Battalion,

American Expeditionary Force now in France.—The Elm City Nursery Co.

Albert F. Meehan, Third Officers' Training Camp, Yaphank, L. I., N. Y. Member of firm Thomas B. Meehan Co., Dresher, Pa.

Wade Muldoon, Sergeant, Headquarters Military Police, Camp Hancock, Ga.—Thomas Meehan & Sons.

Roy W. Nixon, Royal Palm Nurseries, Oneco, Florida.

Mack Overstreet, Royal Palm Nurseries, Oneco, Florida.

Paul Rathert, Battery F., 128th U. S. F. A., Ft. Sill, Oklahoma, New Haven Nurseries, New Haven, Mo.

Norman A. Reasoner, Signal Corps, Aviation Section, San Antonio, Texas. Royal Palm Nurseries, Oneco, Florida.

Meredith P. Reed, Captain, Sixth Company Section U. S. Officers' Reserve Corps.—Vincennes Nurseries, Vincennes, Indiana.

Philip Rouse and Julian Rouse, nephews of the Smith Brothers, now in the Naval Reserve, with headquarters at Jacksonville, Fla.

Charles Schwentker, Battery F. 128th U. S. F. A., Ft. Sill, Oklahoma—New Haven Nurseries, New Haven, Mo.

Charles R. Smith, Aviation Section of the Signal Reserve Corps, Aviation Camp, San Antonio, Texas.—Smith Bros. Nursery Company, Concord, Ga.

Lawton V. Smith, nephew of the Smith Brothers, of Concord Nurseries, of Concord, Ga., now a lieutenant in the Aviation Section of the Army, and stationed near Toronto, Canada.

Clay M. Stark, Stark Bros. Nurseries & Orchards Co., Louisiana, Missouri. American Field Service. Now in France.

Lloyd C. Stark, Major of the Field Artillery, Fort Sill, Okla. Vice-President and a Director of Stark Bros. Nurseries and Orchards Co., Louisiana, Mo. President of the National Association of Nurserymen.

Otto Sweat, Royal Palm Nurseries, Oneco, Florida.

George Taylor, Battery "F," 108th U. S. F. A., Camp Hancock, Georgia.—Thomas Meehan & Sons.

Ray R. Thompson, Royal Palm Nurseries, Oneco, Florida.

Alfred E. Tull, Royal Palm Nurseries, Oneco, Florida.

Edmond Wallays, Royal Palm Nurseries, Oneco, Florida.

W. R. Wedge, Royal Palm Nurseries, Oneco, Florida.

Stanley V. Wilcox, Co. E. 103rd Engineers, Camp Hancock, Augusta, Ga. Thomas Meehan & Sons, Germantown, Pa.

Claud Wilson, Royal Palm Nurseries, Oneco, Florida.

Luther C. Wilson, Royal Palm Nurseries, Oneco, Florida.

John T. Wilson, Royal Palm Nurseries, Oneco, Florida.

William Whitted, Royal Palm Nurseries, Oneco, Florida.

A SENSIBLE SUGGESTION

At the twelfth annual meeting of the Connecticut Nurseryman's Association, W. W. McCartney read a paper on "Labor Saving Devices" and it was suggested that the Secretary write to the Secretary of The American Nurserymen's Association and suggest that they, The American Association, establish a Department of Nursery Implements, for the purpose of securing from its members suggestions as to improvements in present machinery, new machinery and labor saving devices—to pick out the practical suggestions and have same published in "Trade Papers" and, in case of new machinery, to secure a reliable manufacturer for its building.

POLISH PRIVET

Polish Privet was introduced from Poland-Russia by the Iowa State College and was disseminated several years ago by Irvin Engels, Proprietor of the Home Nursery, Lafayette, Illinois. It is really a very handsome form, a fine grower and like all Privets easily propagated. Its greatest value evidently is its hardiness and adaptability for the northern states, where other varieties are so apt to winter kill. Judging from observation in the last three years, it is not going to be a success south of New York, as it seems to be subject to fungous disease, due no doubt to its being grown in a warmer locality than that to which it is adapted.

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by

THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

Advertising rates will be sent upon application. Advertisements
should reach this office by the 20th of the month previous to the date
of issue.

Payment in advance required for foreign advertisements. Drafts
on New York or postal orders, instead of checks, are requested by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., April 1918

Subscribers to "Nurserymen's Fund for Market Development"

Who would have believed four years ago that
WASTE this big wasteful nation could be brought to
realize the necessity of economy and conserva-
tion as much as it has and in so short a time.

It is true it took a "rod of iron" in the shape of a world
war to do it.

There are those who claim that costly as the war is the
benefits will compensate.

The one big evident benefit from which every business
will profit, is the clearing away of false ideas and no-
tions, that this and that could not be done or it must be
thus and so. Necessity very soon sifts out the unessen-
tials and gets down to bed rock and when you get there
you can build better and on a firm foundation.

The nurserymen are getting down pretty close to bed
rock now, reduced demand for their goods, poor trans-
portation for what orders they do have, and practically
no labor. As Ernest F. Coe, of the Elm City Nursery Co.
says: "Trouble and more trouble, but a glorious some
time future." When this future comes are we going back
to the old time wasteful competitive methods of doing
business, or are we going to put the past forever behind
us, and build our business along sensible scientific lines.

The movement to "Develop a Market" not for a single
individual or firm but for the whole trade points the way.
Think of the saving in co-operative advertising as com-
pared with competitive advertising. Then again of the
waste in shipping and reshipping. Apple trees grown in
New York State are planted in Virginia, while those

grown in Virginia are planted in New York and so on
along the line of nursery products.

What a saving there would be if a New York nursery
receiving an order for stock to be shipped to Michigan
would pass it on to a Michigan Nursery to fill it and so
on all along the line. Is there any reason why co-opera-
tion could not be developed to that degree?

Then that wasteful, unscientific surplus with sagging
prices just because there is no data or guiding control in
production.

The lack of knowledge of costs, low wages to em-
ployees, reducing the grade of skilled help are waste in
every sense of the word.

Present conditions are showing up the weaknesses,
waste and foolishness of the old order of things. It is up
to us to profit by the present experience.

The men at the head of the National Association are
fully alive to the needs of our business and are striving
hard to bring order out of the present chaos.

Help them. They need it.

THE ISSUE The Issue before the nurserymen of the
country is—"What amount of money
will be guaranteed for Market Develop-
ment.

For the present do not cloud the subject by debating
or even thinking how it will be spent. We all know, the
market is there, it needs developing, it can be developed
when funds are raised for the purpose. Until the money
is promised it is useless to arrange to spend it.

As Mr. Watson pointed out, every subscriber will be-
come a member and may voice his opinion on the sub-
ject when the time comes. The present temporary or-
ganization is for the purpose of providing funds.

Judging from the way the different nurserymen of the
country have agreed to subscribe to the movement, it
promises to be a success, but it needs to be more than a
successful raising of a given amount of money annually.
Real success will only come when the great majority of
the Nurserymen enter heart and soul into the movement.

The suggestion made at the New England Nursery-
man's Association that every nurseryman volunteering as-
sesses himself one-half of one per cent. of their business
seems to be most equitable.

If this were done it would not only bind all in the
trade very close in a co-operative object, practically mak-
ing them business partners but would distribute the ex-
pense impartially and supply ample funds.

TWO CATALOGUES Two very attractive catalogues
came to my desk a few days ago,
the one from Holm and Olson,
Inc., St. Paul, Minn., and the other from the Royal Palm
Nurseries, Oneco, Florida.

Both in the United States, yet I have not much doubt
at this writing that the St. Paul firm has not yet started
to dig and ship and I am equally sure the Florida nursery-
man's season is just about drawing to a close.

Both catalogues are representative of the class of plants
grown out of doors in their respective regions and both
regions are large enough to be called empires. In look-
ing through their pages, which represent a very large list
of plants, yet the stock is entirely different, very few

kinds being offered in both. In the one palms, bamboos, ficus, pandanus, draceanas, orange trees, bananas, coffee trees and such like plants predominate, while in the other spruces, pines, junipers, deciduous trees and flowering shrubbery of the north form the bulk of the items.

Although we are not all widely traveled, we know that horticulturally speaking, due to latitude and altitude, our country reaches from the Arctic Circle nearly to the tropics and we have a corresponding flora, but we do not always act on this knowledge in a business way. We are apt to distribute our catalogues and advertise our goods as if the whole country climatically was the same.

THE SITUATION Scarcely a day passes without some notice of quarantine coming through the mails, either Federal or State. These, combined with embargoes, make the nurseryman wish he had chosen some other business. Very ominous reports are coming in from different localities in regard to the shipping situation and it begins to look as if the nurseryman would not be able to distribute even what few orders were on hand and employ even the limited amount of labor that is available. As far as the nurseryman is concerned, he is certainly going through troublesome times. There are fat years or periods and lean ones in every line of business. Just at present there are many lines making more profit than ever they did before. If a business is able to lay enough by during prosperous times the lean years do not work such a hardship but with the nursery business, due to varying conditions, there are seldom very profitable periods.

Now is the time to do some hard thinking.

There is nothing beats adversity, as a teacher, and if the nurseryman cannot make a good profit in prosperous times how is he going to "carry on" during the lean years?

Such experiences as we are going through at the present, points very straight at the one great need, namely, sufficient co-operation to insure them getting the maximum from their goods when the getting is good. The line of stock the nurseryman produces is not such as can be kept over, usually if it isn't sold the same year that it is ready for market, it is dead loss, and this reason alone should convince everyone of the need of some central control of production to prevent waste.

St. Paul, Minn., February 28, 1918.

The National Nurseryman,
Hathboro, Pa.

Dear Sirs:—

Enclosed you will please find money order of \$1.50 for another year's subscription. Having been out of town for the last three months I have neglected my subscription. I certainly miss the last issues. I do not wish to be without your journal as I find them quite interesting.

Very truly yours,

R. KRAMER,
498 North Milton St.

OVERCOMING DIFFICULTIES IN TREE PLANTING

By F. Norman Supplee, Landscape Engineer

At the Cheshire Hunt Club Kennels, at Unionville, Pa., owned by Mr. W. Plunkett Stewart, considerable landscape development was undertaken.

A farm, perhaps two hundred years old, had been purchased on which the original mansion stood and the lane leading up to it was lined by 150 year old pines. With here a branch gone, there a top taken out by some severe storm, but stalwart, though gnarled, they still raised their grand heads to face the storms of the four winds. Mr. Stewart, realizing that some day these old fellows must go, decided to plant some young evergreens to take their places and then to continue from where this lane struck the public road right on up into the opposite field with another lane of evergreens to the kennels.

In order to give a pleasanter treatment around the manse, it was decided to plant a screen separating it from the barn, and to make the houndsman's cottage more picturesque, some planning to soften its outlines and to tone down its color was made. The owner also decided upon some foundation planting around the base of the manse, with an immense group of 150 year old box in the circle of the driveway.

In the planting of the trees along the old lane, it was found to be practically impossible to dig with any expediency among the old pine tree roots. Up the new lane a ledge of rock of mica formation was struck, and in the screen between the manse and the barn a stratum of ground, composed of large stones and clay, hammered into place, it might be said, by the wear and tear of years; therefore, dynamiting, as an easy way out, was decided upon. One-third of a stick was used for each shot with one and a half foot of fuse. Two men made the holes and one man cut and prepared the charges, and two men placed the charges in the bore holes. Two hundred and fifty trees were planted in two days with this force.

The nursery had offered a price of \$1.50 each for the planting when they realized the obstacles they were up against. The total cost of planting with dynamite, including the cost of it, was \$98.50. Only nineteen trees were lost out of the two hundred and fifty, and that was more due to the fact that that year was the driest summer that we had had in forty years.

The next year the trees made a foot of new wood. Some of the evergreens were ten feet in height. Two years have now gone by since the planting was done and the trees planted with dynamite are a foot taller than trees of larger size which were planted a year previous to this planting but with pick and shovels.

The Secretary of Agriculture and the Food Administration at Washington are calling for the eradication of the Common Barberry, *Berberis vulgaris*, and its varieties, which is claimed to be a host for the Wheat Rust. It is estimated the Rust caused a loss of a hundred million bushels in the Upper Mississippi Valley States in 1916. It seems the rust does not affect the *Berberis Thunbergii*. Nurserymen should avoid shipping *Berberis vulgaris* into wheat-growing districts.

THE ENCLOSED GARDEN

The gardens of past generations were invariably enclosures with high walls or hedges to protect their contents from the ravages of marauding animals. It is very easy to suppose that when man first attempted to care for and cultivate plants the first requirement that suggested itself was protection and as the idea developed and he found that plants thrived better when protected and sheltered from the storms and winds as well as animals, the protection ultimately developed into the high garden walls and thick hedges and finally into the greenhouse and conservatory. After all, what is a garden but a conservatory of plants?

There are still good sized towns that have no laws to prevent cattle from wandering along the streets and grazing off your front lawn, and in such places the plant lover is an ardent believer in high walls and impenetrable fences to surround the garden.

In more built up localities there has been a tendency among landscape men towards a more open style or park-like treatment. This is admirable in its way but it is anything but satisfactory to the plant enthusiast who likes to gather his rare treasures around him and have them completely under his control or to those who wish a quiet secluded spot for contemplation or quiet restfulness and relaxation.

High garden walls and hedges may sometimes outrage the cannons of art but so do some houses that are exceedingly comfortable within.

After all a garden belongs to the individual rather than the community and if it is a real one, the welfare of the plants in it are the one dominating consideration. Let us have more enclosed gardens and we shall reach a higher plane in the cultivation of plants.

EVOLUTION OF THE LARCH

Most of our coniferous trees, or Gymnosperms, retain their leaves during the winter. So well known is this habit that the members of the group are often called evergreens in common parlance. There are, however, a number of trees that prove conspicuous exceptions to this rule, among which are the American larch (*Larix laricina*), the European larch (*Larix Europaea*), and the cypress (*Taxodium distichum*). These cast off their leaves at the end of the growing season. Whether they have always been deciduous, or whether they have gradually adopted the deciduous habit is therefore, an interesting question. Some light is thrown upon the subject, however, by the behaviour of young larch seedlings. It is well known that plants in the immature condition often run through more or less rapidly former conditions of existence. Thus the young cactus plant may produce true leaves and only later take on the usual cactus form. Larch seedlings appear to be no exception to this rule. For some years after the seeds have sprouted, the plants retain their leaves through the winter, but when older, they throw them off. It seems, therefore, that the larches were once like the other evergreen cone-bearers, and have since adopted the deciduous habit. A similar condition

exists today among genera represented in both the tropics and temperate zones. In the tropical rain forest, the species retain their leaves, but farther toward the poles, allied species are deciduous. Tropical oaks are evergreen and those of northern regions are deciduous, but even in the latter regions seedling oaks often retain their leaves through the winter. The deciduous habit is very apparently an adaptation to avoid the drying effects of the cold. Only in the dried parts of the tropics do the broad-leaved trees drop their leaves and then it is for the same reason—to avoid injury through drouth.—*The American Botanist*.

The following taken from *Collier's Weekly* deals with a phase that is fundamental.

It is a good tune to play, and one which strikes a responsive chord in the minds of most men and women.

It should not be overlooked when sufficient funds are promised to start the Campaign for Market Development.

GARDENING—A PRIVILEGE

All this urging people to grow some foodstuff this summer is not any effort to saddle them with an extra task, but only to wake them up to their opportunities. Too many civilized men have hands too soft to be either masculine or useful. Hundreds of thousands of people in our country stay indoors so habitually throughout the year that even sitting out on a porch has for them a real quality of adventure. Perhaps one reason why porch ceilings are sometimes painted sky blue is to remind the inmates of the look of the sky! Many of us dodge so quickly from one shelter to another, from home to trolley to office and back again, that we get very little notion of how lovely the changes of light are at night and morning. In a garden you get all that and sometimes also the coming of the stars. Legend and science combine to tell us that we arose from the earth and in time will take our rest in it again. Why not know something more of it while we are here? In a garden certainly you learn man's place in this universe as chooser between better and worse, preferring the one and hindering the other, and of his responsibility for his own choices therein. How much of kindness would we have if our race had not had to deal with budding and blossoming plants, and how much of intelligence if we had not had to watch the procession of the day as it strides past between our garden walls? Take your troubles out for cure to the healing peace of green things growing. Get back to earth's realities this year; go gardening!

TRANSPORTATION

The Director General has issued an order No. C.S. 1 A on March 25th exempting seeds and nursery stock under certain conditions from embargoes and directing that no embargoes shall be made by the carriers except and until expressly authorized by the Director General.

On March 19, 1918 all the Regional Directors were directed to give special attention to the movement of less than car lot shipments of seeds and nursery stock.

CURTIS NYE SMITH.

Subscribers' Organization of Nurserymen for Market Development

A Co-operative National Campaign to Create New Business for Nurserymen

Temporary Committee: F. L. Atkins, President; E. S. Welch, Treasurer; John Watson, Secretary; J. Edward Moon, Robert Pyle, Henry B. Chase, Paul C. Stark. Aim: To raise a fund of \$50,000 a year for 5 years Purpose: To create a larger demand for nursery stock of all kinds.

"It ain't the guns nor armament
Nor funds that they can pay,
But the close co-operation
That makes them win the day.
It ain't the individuals
Nor the army as a whole,
But the everlastin' teamwork
Of every bloomin' soul."

RUDYARD KIPLING.

All those interested in the Market Development have reason to feel greatly encouraged at the results so far achieved. We must remember that the total mentioned, and that even these individual subscriptions pledged are merely tentative and by way of suggestion only. The main object being to bring together those nurserymen favorable to a co-operative movement for Market Development, in some sort of an organization for the purpose of a campaign along this line. The response has been prompt and generous and almost without invitation, which shows the majority of nurserymen favor the movement. The committee has sent out few letters and circulars, the trade papers have mentioned it, yet with this small effort a total of \$15,000 a year for five years, \$75,000 in all, or approximately a thousand dollars a day for the time this Committee has been at work, has been promised, and all this without a dollar's expense to the subscribers. It will be seen by examination of the list that it is a very representative one, and it is to be hoped that when the movement gets fairly under way all nurserymen in the country will become subscribers.

The following are a list of those who have promised subscriptions to date.

\$50,000 is the goal. When this amount is promised the organization will begin to act.

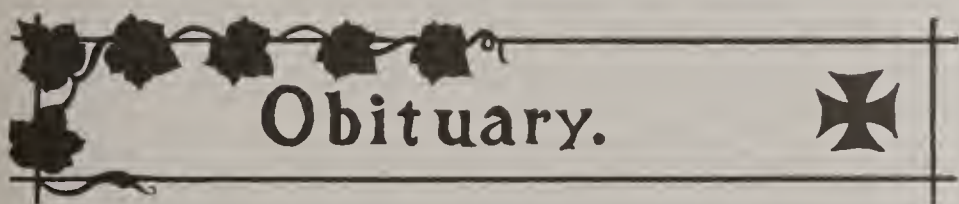
	Amt. per Year for five Years
Adams Nursery Co., J. W., Springfield, Mass.	\$100.00
American Nurseryman, Rochester, N. Y.	10.00
Andorra Nurseries, Chestnut Hill, Penna.	250.00
Augustine & Co., Normal, Ill.	25.00
Aurora Nur. Co., Aurora, Ill.	50.00
Backes, H. J., Humphrey, Nebraska	20.00
Baird & Hall Nursery, Troy, Ohio	15.00
Baker Bros. Co., Fort Worth, Texas	25.00
Barr, B. F., Lancaster, Penna.	25.00
Barrett & Son, Benj., Blue Anchor, N. J.	5.00
Beaudry Nur. Co., W. E., Chicago, Ill.	25.00
Bernardin, E. P., Parsons, Kansas	50.00
Bobbink & Atkins, Rutherford, New Jersey	250.00
Brand Nur. Co., Faribault, Minn.	50.00
Brandley, James, Walpole, Mass.	25.00
Breck-Robinson Nur. Co., Lexington, Mass.	100.00
Breed, E. W., Clinton, Mass.	25.00
Burr & Co., C. R., Manchester, Conn.	250.00
Bryant & Son, A., Princeton, Ill.	50.00
Chanute Nurseries, Chanute, Kansas	5.00

	Amt. per Year for five Years
Chase Co., Benj., Derry, N. H.	100.00
Chase Nursery Co., Chase, Alabama	250.00
Clarke, Daniel, Fiskeville, R. I.	50.00
Clinton Falls Nur. Co., Owatonna, Minn.	150.00
Conard & Jones Co., West Grove, Penna.	250.00
Corn Belt N. & F. Association, Bloomington, Ill.	50.00
Cumberland Nurseries, Winchester, Tenn.	?
Dansville Wholesale Nurserymen, Dansville, New York ..	50.00
Deerfield Nur. Co., Medford, Minn.	?
Elm City Nursery Co., New Haven, Conn.	100.00
F. & F. Nurseries, Springfield, New Jersey	250.00
Fancher Creek Nurseries, Fresno, California	50.00
Farr, B. H., Wyomissing, Penna.	25.00
Ferris, Earl, Hampton, Iowa	25.00
Hank & Son Nur. Co., Hankinson, N. D.	50.00
Harris, S. G., Tarrytown, N. Y.	50.00
Harrison & Sons, J. G., Berlin, Maryland	500.00
Harrison Nursery Co., York, Nebraska	50.00
Heurlin, Julius, So. Braintree, Mass.	50.00
Hicks & Son, Isaac, Westbury, New York	250.00
Hill Nursery Co., D., Dundee, Illinois	100.00
Hillenmeyer & Son, H. F., Lexington, Kentucky	25.00
Hobbs & Sons, C. M., Bridgeport, Indiana	100.00
Holsinger Bros., Rosedale, Kansas	50.00
Hoopes, Bro. & Thomas Co., West Chester, Penna.	250.00
Howard Lake and Victor N. Co., Howard Lake, Minn.	?
Hunt & Co., W. W., Hartford, Conn.	25.00
Ilgenfritz & Sons Co., I. E., Monroe, Michigan	250.00
Ingals, Irvin, Lafayette, Ill.	25.00
Jackson & Perkins Co., Newark, New York	250.00
Jewell Nursery Co., Lake City, Minn.	150.00
Jones, J. F., Lancaster, Penna.	10.00
Kelsey, Harlan P., Salem, Mass.	100.00
Kelley & Sons, J. O., Jefferson, Ala.	10.00
Keystone State Nursery Co., Pittsburgh, Penna.	25.00
Klehm's Nur. Co., Arlington Heights, Ill.	50.00
Kohankie, Martin, Painesville, Ohio	50.00
Leesley Bros., Chicago, Ill.	50.00
Littlefield & Wyman, No. Abington, Mass.	20.00
Lovett, J. T., Little Silver, New Jersey	100.00
McColgan Nurseries, Red Bank, New Jersey	10.00
McCormack, J. J., Lowell, Mass.	25.00
McFarland Co., J. Horace, Harrisburg, Penna.	250.00
McHutchison & Co., New York, N. Y.	500.00
Maloney Bros. & Wells Co., Dansville, New York	50.00
Marshall Brothers Co., Arlington, Nebraska	50.00
Massachusetts Nurserymen's Association	100.00
Meehan Co., Thomas B., Dresher, Penna.	250.00
Momm's Cons Co., Irvington, New Jersey	10.00
Moon Co., William H., Morrisville, Penna.	250.00
Mount Arbor Nurseries, Shenandoah, Iowa,	250.00
Mount Hope Nurseries, Lawrence, Kansas	50.00
Muller, Adolf, Norristown, Penna.	50.00
Naperville Nurseries, Naperville, Ill.	50.00
National Nurseryman, Hatboro, Penna.	50.00
Northwest Nur. Co., Valley City, N. D.	50.00
Parker, Jim., Tecumseh, Okla.	10.00
Pennsylvania Nursery Co., Gerard, Penna.	25.00
Peyton, T. R., Boonville, Missouri	10.00
Pfaender, William, New Ulm, Minn.	?
Pierson Corporation, A. N., Cromwell, Conn.	100.00
Plainfield Nurseries, Scotch Plains, N. J.	25.00
Prairie Nur. Co., Estevan, Sask., Canada	100.00
Princeton Nurseries, Princeton, New Jersey	250.00
Rakestraw-Pyle Co., Kennet Square, Pa.	50.00
Reed, W. C., Vincennes, Indiana	50.00
Roehrs Co., Julius, Rutherford, New Jersey	100.00
Root, J. W., Manheim, Penna.	10.00
Rose Hill Nur. Co., Minneapolis, Minn.	50.00
Saddler Bros., Bloomington, Ill.	50.00
Shenandoah Nurseries, Shenandoah, Iowa.	250.00

	Amt. per Year for five Years
Sherman Nursery Co., Charles City, Iowa	150.00
Simpson & Sons, H. M., Vincennes, Ind.	20.00
Smith Co., W. & T., Geneva, New York	250.00
Sonderegger Nurseries, Beatrice, Nebraska	50.00
Stark Brothers, Louisiana, Missouri	250.00
Stein, Geo. E., Wrightsville, Penna.	5.00
Storrs & Harrison Co., Painesville, Ohio	150.00
Swain Nelson & Sons Co., Chicago, Ill.	50.00
Swan River Nurseries, Patchogue, N. Y.	35.00
Texas Nursery Co., Sherman, Texas	250.00
Thomas & Son, Jos. W., King-of-Prussia, Penna.	25.00
Thurlow's Sons, T. C., West Newbury, Mass.	100.00
Tolleson Nur. Co., Lake City, Minn.	25.00
Uecke, Robert C., Harvard, Ill.	10.00
U. S. Nursery Co., Roseacres, Miss.	100.00
Vanicek, V. A., Newport, Rhode Island	100.00
Van Lindley Nursery Co., J., Pomona, N. C.	200.00
Waxahachie Nur. Co., Waxahachie, Texas	100.00
Weber & Sons Nursery Co., H. J., Nursery, Mo.	50.00
Wedge Nur. Co., Albert Lea, Minn.	150.00
Welch, E. S., Shenandoah, Iowa	250.00
Westover Nursery Co., Clayton, Missouri	50.00
Willis & Co., A., Ottawa, Kansas	50.00
Will & Company, Oscar H., Bismarck, S. D.	25.00
Williams, Miss Rose, Newark, New York	10.00
Wohlert, A. E., Narberth, Penna.	25.00
Wright, George B., Chelmsford, Mass.	25.00

ANNOUNCEMENT

"Wick Hathaway's Berry Plant Nursery" will continue business under the old name with Samuel Hathaway, Mgr., and endeavor to follow out Mr. Hathaway's "Quality and Service."



WICK HATHAWAY

It is with much regret we have to report the death of Wick Hathaway.



Mr. Hathaway went to the hospital to undergo an operation from which he did not recover, after lingering two weeks, he died March 20th.

Mr. Hathaway was 53 years of age and had been engaged in the nursery business for the past 26 years. He was a member of the National Association, Ohio State, and the Western Associations of Nurserymen, and the Western Associations of Nurserymen.

He is survived by a wife, three sons and three daughters.

C. WILSON McNAIR

C. Wilson McNair, of Dansville, New York, died on Wednesday, March 20, at the family home in West Sparta. He was a member of the Dansville Association of Wholesale Nurserymen, a director in the Citizens' Bank of Dansville, an elder in the Presbyterian Church of Dansville, an honorary member of the Union Hose Company, a director of the Dansville Board of Trade, and a member of the Board of Governors of the Dansville Automobile Club.

Mr. McNair was born in the farm home where he died, and his entire life was spent there with the exception of six years when he attended the normal school in Geneseo and a year as a boy in Kansas.

DISSOLUTION OF THE P. J. BERCKMANS COMPANY

P. J. Berckmans Company, incorporated, Augusta, Ga., have applied for a receivership on account of the expiration of their charter, which would occur Tuesday, March 12th, and Mr. L. A. Berckmans has been appointed receiver of the company.

The receivership is, of course, not due to the result of any insolvency whatever, but is a legal action made necessary by circumstances surrounding the organization of the corporation at this time, and the receivership will be empowered to close out the business and distribute the assets among the stockholders of the company, composed of Mrs. Edith F. Berckmans, P. J. A. Berckmans, L. A. Berckmans, and R. C. Berckmans. The whole proceedings are designed to simply technically handle all the details connected with the distributing of the interests of the stockholders.

The P. J. Berckmans Company was for about forty years operated by Mr. P. J. Berckmans himself, and twenty years ago it was incorporated in legal form, and the period of the incorporation ends March 12th, so that it would either be necessary to re-incorporate, or else surrender the charter.

Hardly any other nursery enterprise in the country exceeds the business enjoyed by the company in question, their patronage extending all over the world, and the concern, on the whole, has been a most prosperous and progressive one at all times.

Louis A. and P. J. A. Berckmans, Jr., will continue in business as consulting horticulturists and landscape experts.

CALADIUM ESCULENTUM

The common elephant-ear plant, used in the United States to give a tropical effect in landscape gardening, belongs to the *Colocasia* genus, a root-bearing food plant, a staple article of diet throughout tropical Asia, Polynesia, and Malaya. There are six or seven species in tropical Asia to Polynesia and one in the Philippines (Merrill, Flora of Manila). The portion of the plant used for food is the sessile, starchy, acrid stalk or corm. When prepared for food it is sometimes cleaned under water to prevent an itching sensation of the hands: boiling readily removes the acrid constituent. The tops of some varieties, however, are sometimes used as greens for cooking purposes. The Bureau of Agriculture had in past years a collection of 21 species and varieties most of which were discarded as they were very subject to fungus attacks which greatly hinders their usefulness. In the Philippine Islands this plant is usually planted in rows and cultivation is carried on similar to potato culture in the United States. From 3 to 10 months are required for the plants to mature depending upon the varieties. The plant is usually raised in low moist land and gives fair returns for the labor expended.—*Philippine Agricultural Review*.

The Proper Place of Nut Trees in the Planting Program

By C. A. Reed, Nut Culturist, U. S. Department of Agriculture.

In planting trees for most purposes it is now possible to exercise practically the same degree of choice with regard to the special fitness as is employed in the selection of men for positions or tools for a piece of work. The fruit grower in every part of the country has his special species and pomological varieties from which to choose. The foresters and landscape gardeners have their species and botanical varieties or strains to pick from.

Among the important purposes for which trees are planted the production of native nuts is singularly behind. The leading species of native nut-bearing trees include the hickories, the walnuts, the chestnuts, the pines and the beech. Of these, one of the hickories, the pecan is the only species which has so far been developed by cultivation as to become of importance for the production of an orchard product.

The timber of the pecan is less valuable than is that of most other hickories and is in commercial use only as second-class material. However, it is the most important species of nut-bearing tree in the United States. Its native and introduced range includes the fertile lands of the plains of practically the southwestern quarter of the country. It is neither an upland nor a wet land tree. In the United States it is not found in the mountainous sections, nor, to any important extent, south of Middle Florida. In Mexico it is occasionally found on mountain sides at considerable elevations and some is supposed to be there indigenous. However, according to "Pomological Possibilities of Texas" written by Gilbert Onderdonk, of Nursery, Texas, and published by the State Department of Agriculture in 1911, its success at these latitudes is vitally dependent upon the water supply. In each case investigated by Mr. Onderdonk, while upon official trips made for the United States Department of Agriculture, he found the pecan trees to be adjacent to some stream either natural or artificial. "At Bustamente," says Mr. Onderdonk, "107 miles beyond Laredo, are pecan trees 200 years old that have been watered all their lives and have continued productive. From these trees grown from Texas pecans, pecan culture has been extended until there are now thousands of thrifty pecan trees under irrigation. One owner of a small lot sold his water right when his trees were about 75 years old, and when the writer visited his grounds 14 years later every one of his trees was either dead or dying."

We may yet find the pecan to be suitable for plateau or mountain land growth, but as Mr. Onderdonk reports was the case in Mexico, it is also the case here. The species must have ample water. With the proper amount of moisture, neither too much nor yet too little, there is no way of predicting to what altitudes or even latitudes it may be taken. Its northernmost points of native ranges are near Davenport, Iowa, and Terre Haute, Indiana. Iowa seed planted at South Haven, Michigan, on the eastern shore of Lake Michigan at a latitude of about 42½

degrees have never been seriously affected by winter temperatures. However, they have fruited but little. So far the writer can ascertain the crops of nuts have been insignificant both as regards quantity and character. Dr. Deming reports a large tree at Hartford, Conn., at a latitude of nearly 42 degrees which was then two feet or more in diameter and quite at home, so far as growth was concerned.

Other planted trees are fairly numerous along the Atlantic coast between Washington and New York. There is one in the southern part of Lancaster County, Pa., but so far as is known to the U. S. Department of Agriculture, important crops of nuts have never been realized from any of these northern trees. Crops of nuts from the native trees in the bottoms north of latitude 39 degrees or approximately that of Washington, D. C., and Vincennes, Indiana, are fairly uncertain. Northern nurserymen are now disseminating promising varieties of pecans from what has come to be known as the "Indiana district" which includes the southwestern part of that state, northwestern Kentucky and southwestern Illinois. In many respects these varieties compare very favorably with the so-called "papershells" of the Southern States. They are believed to be of great promise for northern planting in sections to which they may be adapted. However, before any northern varieties are planted for commercial (orchard) purposes, they should be fully tested as to their adaptability in the particular section where the planting is to take place. The commercial propagation of northern varieties of pecans began less than ten years ago; the first attempts were not generally successful; and as a result there are no budded or grafted trees of northern varieties yet of bearing age.

With very few exceptions, there are no named pomological varieties of any other native nut now being propagated. So far as these exceptions are concerned it is probable that fewer than 100 budded or grafted trees of such varieties are yet of bearing age, and of such as have attained the age at which fruit might be expected, exceedingly few have borne in paying quantities for any number of consecutive years. Therefore, with reference to the planting of native nut species for profit, the truth of the situation is simply this: In the ordinary course of events, with the exception of the pecan, years of experimentation in the testing of varieties and in a study of their cultural requirements must be gone through before any native species of nut-bearing trees can be planted in any of the northern states with a certainty of commercial return from nuts alone which would be comparable with that of many other crops which already are upon a well established commercial basis in this part of the country.

With reference to two of the foreign species of nuts which have been introduced, the situation is quite different. In order of commercial importance of the nuts now grown in this country, two foreign species, the Persian

(English) walnut and the almond stand second and third, respectively, the pecan, which is an American species only, being first. With these exceptions, the foreign introductions are all in the experimental or test stage, and while possibly the European hazel (filbert) may now be making a strong bid for commercial recognition in the northwest, and the pistache in parts of California, neither species can yet be recommended for general planting.

With the exception of a few hardshell varieties of almonds which are practically as hardy as the peach and which are suitable only for home planting, as they are in no way to be compared with the almond of commerce, there is now no indication that this species is destined ever to become of commercial importance east of the Rocky Mountains.

The Persian or so-called English walnut is of commercial importance in this country only in the far Western States. In the South, it has thus far failed altogether. In the North and East it has held out gleams of hope, first bright then dull, for more than a century. There is no way of telling the number of trees of this species which have been planted in the northeastern section of this country but let us imagine it to have been 60,000. Of these fully 50 per cent. have succumbed to climatic conditions; 25 per cent. have been but semi-hardy, and possibly 25 per cent. have attained the bearing age. A part of each of the last two classes have borne crops of commercial size for a number of years. Some have produced nuts of good size and quality. A great many of all those surviving are now proving susceptible to a walnut blight upon which Mr. McMurran is to report.

A liberal estimate of the present number of Persian walnuts in this part of the country would be 10 per cent. of the original supposed 60,000 or 6,000 trees. Of these, the writer has positive knowledge of none which are now bearing crops of nuts in such quantity, and of such size and quality and with such regularity and which have so borne for such length of time as to encourage commercial planting. Few of the Eastern grown nuts are so free from tannin as to be really pleasing to the taste or favorably comparable with the best nuts of the market. The writer is now closely watching the best known varieties which the nurseries are putting out, but at the present time there is no variety which in his judgment should be commercially planted without further testing.

The proper place for such partially improved species, as are most of the nut producers hardy in this section at the present time, is that in which they may be used for more than the single purpose of nut production. Most of the species of the botanical family *Juglandaceae* to which the walnuts and hickories belong, are slow growers, and as such, are objectionable to the average planter. In answer to this, it may be said that among trees, slowness of growth is invariably associated with longevity of tree and its value when cut as timber. Also, when due pains are taken, it is possible to select species which are exceedingly satisfactory in the landscape. Several of the slides which are to follow illustrate the individual beauty of selected nut trees and some show their effective use in the landscape.

Foresters are now advocating the planting of trees in waste places in the country, especially about the farm buildings. There, are, perhaps, no conspicuous waste

places with a greater aggregate area than the strips along the public highway. In certain foreign countries, these strips are planted to fruit trees and the right to harvest awarded to the highest bidder. The revenue so obtained goes a long way toward keeping the highways in good condition. It is possible that this practice may some time be introduced into the United States, but until public opinion is radically changed, the planting of fruit trees along the highways can not be expected to yield any satisfactory returns to the public. The experience of Dr. Morris who planted cherry trees along the public road past his farm in Connecticut, where we have just been, is typical of what under present conditions might be expected in any part of the country. When the cherries were ripe, automobile parties come for many miles to pick the fruit, and when that in the highway was gone, the cherries from the nearby orchard were taken. In both cases, the branches were broken down and the trees left in a badly mangled condition. Dr. Morris then tried nursery-grown and expensive evergreens, but on Sundays, automobile parties came again with spades and shovels and dug up the trees.

The ratio of population to tillable land in this country is not such that, for a long time to come, the American people, as a whole, will be pressed into using the highway land for the production of crops, or into respecting the right of the public to harvest such crops as might be grown in its highways. Therefore, for the present, except in densely populated or in more than ordinarily well regulated communities, it would be useless to advocate the planting of ordinary fruit trees along the public roadways.

Irrespective of the possible value of their crops, fruit trees of most species are both too small and too short-lived to be suitable for highway planting. With nut trees, the situation is entirely different. The native walnuts, most species of hickories and the American beech are large-growing and long-lived trees. In addition, they are capable of withstanding severe temperatures; they are tough and strong and not liable to injury by storm or while being climbed by ordinary persons; and they readily adapt themselves to a wide range of soil, moisture, and climatic conditions.

Ordinary species of nut trees cannot be recommended for the dual purpose of timber and nut production, as, for the former purpose, the trees should be planted close together in order to induce length and straightness of trunk with a minimum of top or bearing surface, while for the latter, they should be planted in the open and given space for the maximum development to bearing surface and a minimum length of trunk. The great demand for hickory in the making of axles, wheels and other vehicle parts and handles for tools, and for walnut in the manufacture of furniture and gun stocks makes it not only possible but common practice to use these woods in short lengths. Therefore, both species planted along the highways and in other waste places might profitably be converted into timber upon reaching maturity, if their crops of nuts should prove to be of small commercial value.

The butternut, *J. cinerea*, is a less symmetrical grower than are the black walnuts. The timber is less valuable and the nuts are cracked with greater difficulty. Nevertheless, it is the most hardy of any native species of *Jug-*

tans. Its kernels are rich in quality and of a flavor more pleasing to some persons than that of any other nut. Cracking the native butternut and marketing the kernels affords the rural people in many sections a fairly profitable means of employment during the winter months. Its native range extends farther north than does that of either the eastern black walnut, or that of the shellbark hickory, *Hicora ovata*, and is considerably beyond that of the shellbark *H. laciniosa*. Therefore, in view of its hardness, and the merit of its kernels, it is well worthy of consideration for planting in the most northern parts of the country.

Were it not for the blight which is now making practically a clean sweep of destruction over the eastern states, wherever the native chestnuts are found, the American chestnut, *Castanea dentata*, would certainly be entitled to leading consideration as a highway, an ornamental or a nut producing tree. Unaffected by blight or other disease, it is one of the largest growing and most graceful species in the eastern United States. The European chestnut is nearly as susceptible to the blight as is the American species. The chestnuts from eastern Asia now appear to be sufficiently immune to offer a practical solution to the situation by their introduction into this country. However, they commonly lack the sweet flavor of the American species and need hybridizing in order to improve their quality. This the Federal Department of Agriculture is now doing, and in due time, there may be something to offer in ample quantity which will make a satisfactory substitute for the native species. Exclusive of the Asiatic species which can be recommended for planting in the blight affected area, and these should be planted only for test purposes.

The pines referred to at the outset of this article as being important nut producers are all western species found only on the mountains and nowhere under cultivation. There are at least 14 American species. Representatives are found in the Rocky Mountain states. The most important species is *Pinus edulis*. It is found at altitudes of from 5,000 to 7,000 feet in the mountains of New Mexico, Arizona and Northern Mexico. In favorable years, the seeds are gathered in enormous quantities under the name of "pinons," or according to the Mexicans, "pinyonies." The nuts are rich in flavor but small and difficult to extract from the shells. They are not well known in the eastern market but in the Southwest they form a highly important article of food for the Indians and Mexicans. These pines are exceedingly slow growers and not of graceful form. They could scarcely be considered for commercial planting, except at the altitudes to which they are common, and then, probably, only where some more satisfactory shade trees would not succeed.

Among all American species of trees, it is probable that in a combination of beauty, longevity, strength and hardness, the American beech, *Fagus grandifolia* is unexcelled. Although commonly looked upon as being a northern species, its range extends to Northern Florida and west to the Trinity River in Texas. It is most familiar as a clean barked, spreading tree, with low head, and a height from 50 to 60 feet. However, its form depends largely upon environment. The writer has seen it in the bottoms of Southern Georgia, in common with the magnolia, growing to a height of from 75 to 100 feet and with

trunks of two feet in diameter extending upward in a manner which, with regard to height and uniformity of size, compared favorably with the long-leaf Georgia pine. The nuts of the beech are rich in quality and of excellent flavor, but owing to their small size and the great difficulty attending the extraction of the kernels, they are not rated as being of direct importance for human food. Their principle use in this country is a mast crop for turkeys and swine, for which they serve a most useful purpose. Crops which can be used in this manner to good advantage, thus practically obviating the problems of harvesting, are certainly well worth thinking about in these days of labor scarcity.

There are few large sections of the United States adapted to the growing of trees to which some nut-bearing species is not suited. Most species of nut trees are as capable of producing shade and ornamental effect, and are as hardy and lasting as any other which might be mentioned. In addition, they produce an edible product which is entering into the list of staple food products with great rapidity. The present scarcity of meats and the consequent high prices are compelling the substitution of other products. The superiority of nuts over practically all other products which are available, as substitutes, scarcely need argument. Already, nuts are being pressed into service as rapidly as production permits and perhaps more so than prices and comparative food values justify. Singularly enough, this section of the United States which is the oldest and most thickly populated portion of the country and that within which the greatest number of edible species of nuts are indigenous, is today practically without pomological varieties for planting. Within this area, individuals have made tests of species and varieties for many generations, yet little progress has resulted. The obvious need is for further test on a large scale. A better opportunity for the making of such a test could scarcely be imagined than that of highway planting.

Pomologists are firmly recommending the exclusive use of budded or grafted trees. But this advice applies only to orchard planting for the purpose of commercial production. Until more and better varieties are known and their merits established, that portion of the country lying north of the pecan belt and east of the Rocky Mountains must await the development and trial of new varieties. Seedlings must be planted in large numbers from which to select varieties. The process is too slow and the percentage of varieties which may be expected to be worth while too small for it to be possible for the individual to make much headway during an ordinary lifetime. Our present system of national highways by which all parts of the country are being connected is perfecting the opportunity. The general planting along these great national highways of elm, oak, poplar, tulip, cedar, hemlock, magnolia, pine or any other species which, unless cut, are capable of producing no crop other than that of shade, would hardly be in keeping with the present need for utility. It would be giving a questionable degree of thought to the welfare of future generations.

To the list of nut trees as utility trees there might be added the sugar maple, and certain species of prolific-bearing oaks. The former could be drawn upon for the making of syrup and sugar, and the acorns from the lat-

ter could be put to good use as hog and turkey food. In wet sections, willows might prove useful from which to cut material for furniture or tying bundles.

A way of overcoming the objection of slow growth of some of the nut species might be the alternate planting of quick growing species which would furnish shade in a minimum length of time and which could be cut for pulp or other purposes by the time the nut trees reach maturity.

A practical objection to highway planting of nut trees is that unless cared for, such trees are in danger of becoming breeding places for diseases and insect pests which would spread to nearby orchards. However, such planting in numbers are too small to be worth caring for is not to be considered. Already the country is agreed

that the maintaining or the middle of the road in such a condition that it can render maximum service is a paying investment. The suggestion here made is only as the next step in highway investment. It is a proposition to make more comfortable and attractive the present system of roadways, and at the same time to help develop new varieties of nut trees for orchard planting. Unless such new varieties are soon to become available, a large part of the country will presently find itself dependent upon outside sources for its principal substitute for meat and its main supply of vegetable fats.

A little thought should be able to work out a sound program for the planting of utility trees on practically every highway in this country.

Is Crown Gall Injurious to Apple Nursery Stock?

By S. B. Fracker, Assistant Entomologist, Madison, Wis.

Under Wisconsin conditions the presence of crown gall and hairy root on apple trees is the cause of a greater commercial loss to the nurseryman than any other disease. The toll taken by the required destruction of all trees infected with it is very heavy. At the same time there is a real doubt in the minds of the nursery proprietors as to the serious or injurious nature of the trouble.

This doubt is increased by the published results of experimental plantings in New York, by the opinion expressed in a U. S. Department of Agricultural bulletin that the effects of crown gall have been greatly exaggerated, and by the fairly well advertised presence in a neighboring state of a flourishing orchard planted entirely with trees bearing large galls.

The writer, therefore, during the last autumn packing house inspection seized the opportunity of making some observations in regard to the relative size of infected and non-infected nursery trees. In all cases the grading into sizes was done by the nurseryman himself and the determination of the presence of crown gall made by the author. All indications of an infection were included, although a small gall or one on a lateral root does not cause the tree to be condemned under our present regulations.

Observations were made in four nurseries, two of which use three grades in addition to culls and two admit only two grades. In all cases the lowest size above the culls is sold for a very low price—below cost of production—while all the profit must be made on trees of the first or first and second grades as the case may be. Consequently, in the following figures the culls and lowest grade trees are added together.

In the two nurseries using three grades, a total of 596 trees (chosen at random, "nursery run") were classified as to infection and size. Three varieties were used—

Duchess, Fameuse, and Transcendent crab—with results as follows:

	Number Ones		Number Twos		Threes & Culls		Per Cent. Ones & Twos Total	
	No.	%	No.	%	No.	%		
Clean	229	65.1	49	13.9	74	21.0	79.0	352
Infected	92	37.7	77	31.6	75	30.7	69.3	244
Totals	321		126		149			596
Superiority of non-infected trees		27.4%					9.7%	

This table indicates that out of 1,000 trees not infected with crown gall the nursery might expect 651 trees of the first grade and 139 of the second, a total of 790 trees which would pay the cost of production. In 1,000 infected trees, however, only 377 would be first grade, 316 second, a total of only 693 trees which would pay for raising. If we assume that the best apple trees are worth ten cents apiece wholesale and that the "seconds" are worth three-fourths as much as the "firsts" the value of 1,000 non-infected trees would be $\$65.10 + (\frac{3}{4} \times \$13.90) = \$75.52$. One thousand infected trees, if allowed to be sold, would be worth $\$37.70 + (\frac{3}{4} \times \$31.60) = \$61.40$, a reduction of 18.7 per cent. in value.

In one of the nurseries selling only one grade of trees at a profit the figures, mainly for Duchess, are as follows:

	No. Ones		Seconds and Culls		Totals	Per Cent. No. Ones
	No.	%	No.	%		
Clean	147		58		205	71.7
Infected	125		86		211	59.2

In this case infection in the 416 trees examined apparently reduced the profitable trees from 717 per thousand to 592 per thousand, a reduction of 17.4 per cent. in value.

The fourth nursery usually has so few infected trees that the method employed in the others was scarcely available here. In one variety of their own production, however, which they had been careless in grafting, between 50 and 60 per cent. of the "seconds" proved to be

infected with crown gall but only about 10 per cent. of the "firsts."

SUMMARY

In the first three nurseries discussed, 1,012 apple nursery trees were examined for crown gall and hairy root and graded into sizes. They indicate that the infected trees, if their sale was permitted, would yield 17 to 18 per cent less gross return to the nursery than a similar number of non-infected trees. This is in spite of the fact that the largest of the infected trees were usually as large and apparently as strong as the non-infected ones. In taking figures the separate nurseries and varieties were tabulated separately and not a single nursery or variety shows as great a proportion of trees of salable size among those with crown gall as in those without the disease.

An interesting point in connection with the inspection at the first two nurseries, both of which make a practice of providing their customers with two grades of stock, was the great diminution in the number of first grade trees when infected and the increased number of seconds. In many cases there seemed to be a tendency for the infection to decrease the vigor of the plant without severely forcing its size down below commercial value.

The correlation between small size and infection might be said to be due to a possible greater susceptibility of weak trees. Phytopathologists, however, state that the reverse is true and only strong actively growing tissue will support the disease. In view of the market deleterious effects of crown gall in the irrigated orchards of the west, it seems most likely that this reduction in size in Wisconsin nurseries is a direct result of infection.—*Journal of Economic Entomology.*

PATRIOTISM, PIGS AND POSIES

It must be admitted that the subject chosen is a rather unusual combination, and it may need some explanation. Everybody knows what patriotism is, and in these war times especially it should stand first in the thoughts of every citizen. Likewise everybody knows what a pig is, and while possibly not everyone is equally familiar with the word posies, surely the older ones and especially the old-fashioned ones, know well enough what posies are. The word is not in very common use at the present time, but posies is the homely word which was used for all kinds of flowers in years gone by.

Pork, we are told, is one of the chief elements necessary to insure the winning of the present war, so the relation between patriotism and pigs is easily understood. It may be a far cry from pigs to posies, and we are not going to try and prove any great bearing of one on the other, but rather suggest that people who raise flowers may easily add swine to their activities, and in that way prove their patriotism in a practical way.

Mr. Hoover, our food administrator, says: "We need a 'keep a pig' movement in this country—and a properly cared for pig is no more insanitary than a dog." Of course it is not possible that every flower grower can raise a pig, but we believe we are safe in assuming that fully half the people who grow flowers either commercially or for pleasure are so situated that they could raise swine,

some of them not simply one pig but a plurality of them.

Further we want to suggest that the raising of pigs is a natural adjunct of gardening, not especially flower gardening, but all kinds of gardening, both vegetables and flowers. The natural waste from a vegetable garden can be fed to swine and turned into a profit, and in these war times every little thing should be saved and how better can garden wastes be saved than by the pig route?

We have still another argument in favor of combining the raising of swine with flowers. Who would attempt to grow flowers without a liberal supply of suitable fertilizer, and where is there a more suitable fertilizer than pig manure? Those who dig in the soil and are actually in contact with flower growing will not, we trust, be shocked by this plain statement of fact. The opinion of those who are so superficially interested in the subject that they have not dug in the soil, and thus come in direct contact with the subject, is not worthy of consideration.

It is admitted that flower growing is a "non-essential pursuit" but flower growers need not neglect their favorite work because of war times. Instead of curtailing their flower growing they should simply add to their activities the raising of swine. If this war continues for a year or two yet, the "non-essentials" must be curtailed or eliminated, and flower growers to justify their existence as such, should balance their activities by the production of some product essential to the maintenance of the world. Mr. Hoover says that the three most important things necessary to win the war are swine, ships and wheat; and please note that he places swine first.

How can flower growers or any one else suitably located help win the war any better than to start in the swine business? Now, we must admit right here that there is a personal interest in this subject from the fact that the editor is engaged in the raising of pigs as a side line. Flower growers, try it yourself and see if you do not like swine. There are human traits about them that are altogether likeable and remember that a patriotic purpose is being served with every pig that you raise. Let us say nothing about the possible profit, but you need not infer but what there will be a good profit if you use as good judgment in the handling of swine as is necessary in the success of any other business enterprise.

It is but a little over two years since we became interested in this subject and we now have upwards of one hundred head of swine, big and little. To brag a little (and who does not like to tell of his own successes) we had seven young sows farrow last fall with their first litters and they had fifty-seven pigs or one better than eight pigs each and these sows have raised to weaning age more than an average of seven pigs each.

What breed should you raise? Any breed that looks good to you is the right breed and whether the swine you raise are pedigreed or mongrels, they will appeal to your affection as well as to your financial interest and patriotism. Subscribe for a good swine paper at once and study up the subject and arrange in the spring to buy and raise at least one pig.

MADISON COOPER, in the "Flower Grower."

Dwarf Conifers at the Arnold Arboretum

In many genera of conifers dwarf individuals, which are seminal or rarely bud-variation forms, have appeared and have been multiplied by nurserymen and others interested in the cultivation of such plants, the largest number of such abnormal forms being found naturally among the seedlings of species which have been the most largely cultivated. The seedlings of no other conifer, perhaps, show so great variation as those of the Arborvitae of the eastern United States, *Thuja occidentalis*. Some of these forms are very dwarf, forming round compact heads only a foot or two high; others grow into large globular masses; others are narrow pyramids, and some have pendulous branches. They vary, too, in the color of the foliage, that of some forms being of different shades of green, and that of others yellow. Like many other dwarf conifers, several of these forms are well suited for the decoration of the rock garden and for dwarf hedges or small beds. The collection of the forms of *Thuja occidentalis* in the Arboretum is probably one of the largest in existence and contains many interesting specimens. It is established on Yew Path leading from the Valley Road to the Hemlock Hill Road, and adjoining the Arborvitae is the collection of Chamæcyparis or White Cedars. The species of this genus from the Pacific Coast are not hardy in New England, so it is not possible to grow here various dwarf forms of *C. Lawsoniana* which are common in European collections. Of the Japanese species, often called Retinosporas, there are several dwarf forms, the most beautiful of these perhaps being the variety *nana* of *C. obtusa*. For those who admire plants with colored foliage *C. pisifera argentea* is an attractive small plant. Of the White Cedar of the eastern United States (*C. thyoides*) there are a few interesting dwarf forms. The most conspicuous of these is probably the variety *ericoides*, of dwarf, compact, pyramidal habit, with leaves which as well as the branches, turn reddish brown with the first cold weather and retain this color until spring. Another interesting form is the variety *leptoclada*, also of dwarf habit and bluish green color.

One of the most valuable of all the dwarf evergreens is that variety of the Japanese Yew (*Taxus cuspidata*) which is now cultivated in American gardens as variety *brevifolia*, but is not to be confounded with *Taxus brevifolia*, which is a California tree. This variety of the Japanese Yew has very dark green leaves and wide-spreading, rather irregularly growing branches; it attains a height of only four or five feet but sometimes covers a space ten or fifteen feet in diameter. Seedlings raised from this plant often assume the upright growth of the typical species. In the collection of Yews on Yew Path there is also a small very compact plant of a form of *Taxus cuspidata* which is one of the most distinct and beautiful of all the dwarf evergreens in the Arboretum; this appears to be a unique plant and has not received a name. Nearly all the forms of the European Yew (*Taxus*

baccata) suffer more or less severely here from cold and several of them are unable to survive a New England winter. There is, however, one form which is perfectly hardy; this is a broad, flat-topped, rather compact shrub not more than two feet high, with exceedingly dark green foliage. This variety is sometimes sold in American nurseries as *Taxus repaudens*; this name has not been published, however, in any of the technical books on conifers and we know nothing here of its origin. It has lived here entirely uninjured for several years on the edge of the group of Yews on Hemlock Hill Road at the entrance of Yew Path, one of the most exposed positions in the Arboretum. This is certainly a plant of great value for this part of the country.

Among the Junipers there are several dwarf forms of the arborescent species. Of our common Red Cedar, *Juniperus virginiana*, a form with branches spreading close to the ground grows at several places on the coast of Maine. The plants of this form in the collection are too young to show their habit; it has not yet received a name. The form *globosa* of the Red Cedar is a small, round, handsome shrub well worth a place in collections of these dwarfs. The var. *tripartita*, which is not rare in European nurseries, is a low broad shrub with spreading and erect branches forming a wide open head. There are a number of large plants of this form on the left of the entrance to the path which leads from Yew Path to the knoll on which the Juniper collection is established.

Of *Juniperus chinensis* the best known dwarf form is the variety *procumbens*, with elongated branches spreading into wide mats. Of this species there are also in the collection plants of a dwarf form with erect stems forming small, round-topped shrubs. Of the European Savin (*J. Sabina*) the var. *tamariscifolia* is a vigorous prostrate shrub, and the variety *humilis*, which is the smallest of all the Junipers in the collection, is only a few inches high with small, spreading prostrate stems.

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Jackson & Perkins Co.
 (SOLE AGENTS)
 NEWARK, N. Y.

ESTABLISHED 1893

THE NATIONAL NURSERYMAN INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock.

Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed.

Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all leading nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock offered for sale.

SUBSCRIPTION PRICE \$1.50 per year in advance. FOREIGN SUBSCRIPTIONS \$2.00 per year in advance.

Advertising Rates on Application

THE NATIONAL NURSERYMAN PUBLISHING COMPANY Incorporated

Subscribers to "Nurserymen's Fund for Market Development."

Hatboro, Penna.

When writing to Advertisers please mention the National Nurseryman.

Bobbink & Atkins

Nurserymen and Florists

RUTHERFORD, NEW JERSEY
Palms and General Decorative Plants, **INSPECT**
Conifers, Shade and Ornamental Trees **INVITED**

ASK FOR WHOLESALE CATALOGUE
Subscribers to "Nurserymen's Fund for Market Development."

FLOWER POTS

We are selling Agents for the best made red burned pure **CLAY POTS AND PANS**, shipped direct from Pennsylvania Pottery to purchasers; for list and terms address

AUGUST ROLKER & SONS

51 Barclay Street, - - NEW YORK CITY.

1 and 2-Year Old Concord Grapes

Extra Fine, cheap by the 1000.
California Privet and Berberry for Hedging.
Ampelopsis Veitchi, 2 years, cheap in quantity. St. Regis Raspberry and all other Small Fruits, etc. Send for Price List.

CHAS. BLACK, HIGHTSTOWN, N. J.

Fruit Trees, Roses, Manetti Stocks

in heavy quantities

JOHN WATSON, Nurseryman,
Newark, New York

Is our sole agent for United States and Canada

S. SPOONER & SONS,

The Nurseries - - Hounslow,
Est. 1820 England

SCARFF'S NURSERY

Headquarters for
Small Fruit Plants

1200 Acres "At it 25 Years"

Strawberries	Currants	Rhubarb
Raspberries	Gooseberries	Asparagus
Blackberries	Grape Vines	Horseradish
Dewberries	Privet	Hardwood Cuttings
Berberry	Spirea	Butterfly Bush

100,000 transplanted Raspberry, Blackberry and Dewberry plants for retail trade. See wholesale list before placing your order.

W. N. SCARFF & SONS
NEW CARLISLE - OHIO

Portland Wholesale Nursery Co.

122 1/2 Grand Avenue, Portland, Oregon

General Nursery Stock and Nursery Supplies

APPLE, one year, large assortment.
PEAR, one and two year, mostly Bartlett.
CHERRY, one and two year, general assortment.
PRUNE, one year, mostly Italian and French.
GOOSEBERRY, one and two year, Oregon Champion.
SHADE TREES in assortment.
ROSES, field grown, large assortment.

Our Trade List is now ready; a postal card will bring it.

A Large Stock of Apple, Pear, Cherry and Peach Grape Vines, Blackberry and Raspberry Plants

And a general line of **ORNAMENTAL TREES** and **SHRUBS**. All stock clean and thrifty, the best that can be grown.

T. B. WEST, Perry, Ohio.

W. T. HOOD & CO. OLD DOMINION NURSERIES

RICHMOND - - - VIRGINIA

We offer for Fall 1917 and Spring 1918, general line of Nursery Stock—California and Amoor River Privet, Norway Maples, Oriental Planes, Evergreens, etc.

We will have a heavy stock of Peach Trees and Norway Spruces on which we can quote attractive prices.

We expect to be in position to offer Natural Peach Seed, crop of 1917. Send us your list for quotations.

W. FROMOW & SONS

Azalea mollis, Rustica and Ghent in all the leading varieties, grown from layers not grafted.

Manetti Stocks clean and well rooted for grafting or open ground.

Standard, Climbing, Weeping and Dwarf Roses in great variety **Rhododendrons**, the cream of the Hardy American varieties.

Andromeda floribunda, japonica, and speciosa, bushy budded plants.

Kalmia latifolia.

Green and River's Purple Beech in all sizes up to 12 feet.

Prices and full particulars on application.

WINDLESHAM NURSERIES

Surrey, - - - England.

ALL "AMERICAN NURSERYMEN"

Wishing to do business with Europe should send for the

"Horticultural Advertiser"

This is The British Trade Paper being read weekly by all Horticultural traders. It is also taken by over 1000 of the best Continental houses. Annual subscriptions to cover cost of postage, \$1.00. Money orders payable at Lowdham, Notts. As the H. A. is a purely trade medium applicants should, with the subscription, send a copy of their catalogue or other evidence that they belong to the nursery or seed trades. Address

Editors of the "H. A." LOWDHAM, NOTTS, ENGLAND

TREES

Largest assortment in New England. Evergreens, deciduous trees, both common and rarer varieties. Sturdy, choice stock that can be depended upon. Send for catalog and special trade prices.

The Bay State Nurseries

North Abington
Mass.

SHRUBS

This New England soil and climate produce fine sturdy shrubs. Special trade prices. By the thousands, hardy Native and Hybrid **Rhododendrons**—transplanted and acclimated. Send your lists let us est.



Nurserymen Who Are Prepared Secure Profitable Contracts

Frequently you might secure contracts for park, cemetery or country estate developments if you could execute the entire work. Our organization will co-operate with you, supplying all factors for securing such contracts, and making much larger sales of your own nursery stock. The service we offer includes

Grading and Road Construction

Pools—Walks—Gardens

Large Tree Moving and Planting

Contracts for spring work should be arranged for at once. We will go anywhere east of the Mississippi River. A wire or letter will place us in touch with you immediately. Write us for details of our methods and policy, and list of references.

"Constructors of Landscapes"

HYLAND-JENCKS

Landscape Engineers and Contractors

507 Fifth Ave., New York



NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER—We offer all or any part of an accumulation of long Nursery Bands one inch in width and sixty inches to one hundred and twenty inches in length, at a reduction of twenty dollars a ton. This offer holds good until stock is disposed of.

WRITE US

COVERING YOUR WANTS IN STEEL BANDS

American Steel Band Co.,

888 Progress Street,

ALLEGHENY, PA.

THE CHASE LABELS

For Nurserymen and Florists are Excelled by None

Plain, Painted, Wired with Tinned or Copper Wire and
PRINTED IN ANY MANNER that may be called for

*Prices as low as First-Class Work and Unequalled Promptness in
Delivery will justify.*

THE BENJAMIN CHASE CO.

P. O. Address, DERRY VILLAGE, N. H.

Western Union Telegraph, DERRY, N. H.

Subscribers to "Nurserymen's Fund for Market Development."

"BUDTIE"

What is it?

There will be no Raffia for sale this year. Government requisitioned all of it for war purposes.

What will you do for budding this year?

USE "BUDTIE" OF COURSE

Write us for samples and prices at once.

THOMAS B. MEEHAN CO.

Introducers of "Budtie"

DRESHER,

PENNA.

Subscribers to "Nurserymen's Fund for Market Development."

Strawberry Plants

of selected money making and garden variety. Clean roots and clean foliage plants of the highest fruiting quality.

Get in touch with us for Special arrangements to supply your wants. Will ship to you or direct to your customers. First class service in every respect and plants that will please your trade.

V. R. Allen

59 Lane Ave.

SEAFORD - DELAWARE

Telegraph both
Western Union &
Postal

SPRING 1918

We want your order—large or small—

FOR

APPLE, 2 and 3 years,
PEACH, 2 years, Good,
STANDARD PEARS.

List of Varieties upon request.

CALIFORNIA PRIVET, 2 year, well branched, 2-3 ft.,
18-24 in., 12-18 in.

Special prices on carload lots.

ASPARAGUS, 2 year strong.

Oriental Planes, Norway Maples, Pin Oaks, Red Oaks,
Willow Oaks, Carolina and Lombardy Poplars, Willows;
all sizes.

GRAPES, 1 year, good stock.

ASK FOR OUR TRADE LIST.

Franklin Davis Nurseries Inc.

JOSEPH DAVIS, General Manager,

BALTIMORE

MARYLAND.

STRAWBERRY PLANTS

PEACH

APPLE

PEAR

A select list for immediate shipment. Order by telegram
at our expense.

STRAWBERRY PLANTS

5,000	Aroma
5,000	Brandywine
10,000	Big Joe
5,000	Climax
10,000	Early Ozark
5,000	Excelsior
50,000	Gandy
10,000	Glen Mary
5,000	Haverland
50,000	Klondyke
5,000	Lady Thompson
5,000	Lupton
5,000	Matthews
5,000	McAlpin
10,000	Mitchell's Early
11,000	New York
10,000	Parsons' Beauty
5,000	Progressive
5,000	Superb
5,000	Tennessee Prolific
10,000	Warfield
10,000	Wm. Belt

PEACH—One Year Budded

1 in up	¾ in	9-16 in	½ in	7-16 in	5-16 in
7-8 ft	6-7 ft	5-6 ft	4-5 ft	3-4 ft	2-3 ft
8,000	Belle of Georgia				
2,000	Beer Smock				
200	Edmont Beauty				
1,500	Engle's Mammoth				
3,000	Ford's Late White				
2,500	Geary's Hold-On				
2,500	Iron Mountain				
2,500	Kalamazoo				
1,500	Krummell				
300	Moore's Favorite				
200	Mountain Rose				
400	New Prolific				
300	Steven's Rare Ripe				
200	Walker				
200	Weaver				
200	Willett				
300	Wonderful				

APPLE—One Year Budded

5-8 in.	½ in.	3-8 in.
5-6 ft.	4-5 ft.	3-4 ft.
200	Alexander	
3,000	Baldwin	
2,000	Ben Davis	
300	Bullock, (A. G. Russett)	
100	Chenango	
5,000	Delicious	
300	Fallawater	
2,000	Fameuse	
1,000	Gano	
3,000	Gravenstein	
200	Hubbardston	
200	July, (Fourth of July)	
200	Lowry	
8,000	McIntosh	
300	Nero	
3,000	Northern Spy	
100	Opalescent	
500	Rambo, (Summer)	
400	Rambo, (Winter)	
1,000	Red Astrachan	
3,000	R. I. Greening	
1,000	Rome Beauty	
600	Smokehouse	
200	Spitzenburg	
3,000	Starr	
600	Sweet Bough	
1,200	Thompkins King	
200	Transcendent	
1,200	Wagner	
1,000	Wealthy	
6,000	William's Early Red	
5,000	Winter Banana	
800	Wolf River	
500	Yellow Newtown	

APPLE—Two Year Budded

3-4 in.	5-8 in.	½ in.
6-7 ft.	5-6 ft.	4-5 ft.
100	A. G. Russett, (Bullock)	
1,000	Alexander	
5,000	Fameuse	
400	Fallawater	
700	Fourth of July	
3,000	Gravenstein	
200	Hubbardston	
400	Lowry	
4,200	Northern Spy	
10,000	R. I. Greening	
1,000	Stark	
1,300	Smokehouse	
600	Spitzenburg	
700	Tompkins King	
400	Winter Rambo	
8,000	Wm. Ely. Red	
600	Wolf River	
500	Winter Banana	
500	Wagner	

PEARS—Two Year Budded

3-4 in.	5-8 in.	½ in.
6-7 ft.	5-6 ft.	4-5 ft.
4,000	Bartlett	
1,500	Seckel	
500	Lawrence	
500	Anjou	
500	Clapp's Favorite	
300	Garber	

KEIFFER PEARS—Two Year Budded

3-4 in.	5-8 in.	1-2 in.
6-7 ft.	5-6 ft.	4-5 ft.
2,000	Keiffer	

A complete list of our offerings will be mailed promptly on request.

HARRISONS' NURSERIES,

Berlin,

J. G. Harrison & Sons,

Maryland

Subscribers to "Nurserymen's Fund for Market Development."

Press of Robinson Publishing Company, Hatboro, Penna.



THE NATIONAL NURSERYMAN



MAY 1918

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of

*Peach, Gooseberries,
Currants, Berberis,
Spirea Van Houtte,
Other Ornamental Shrubs,
H. P. Roses, Etc.*

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.
Monroe, Mich.

Subscribers to "Nurserymen's Fund for Market Development."

*Progressive, Superb
and Peerless
...Everbearing...
Strawberry Plants*

*We can supply you fresh dug every
day. Healthy true-to-name, well root-
ed at attractive prices, during the first
few days of May-for prompt accept-
ance.*

Address

The W. F. Allen Company
Salisbury, Maryland

MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

Shenandoah, Iowa



Our Specialty

A large and complete line of high quality Nursery Stock
for the wholesale trade.

We still have a good assortment of FRUIT TREES,
SMALL FRUITS, SHADE and ORNAMENTAL TREES,
SHRUBS, ROSES and VINES.

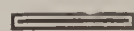
With our superior storage facilities we are able to
furnish a good assortment of stock for shipment until the
middle of May.

ASK FOR TRADE LIST AND BULLETINS.

We are subscribers to the NURSERYMEN'S FUND FOR
MARKET DEVELOPMENT, a co-operative national campaign
to create new business. Ask about it.

RUSH ORDERS

You want stock quick. Our bulletins are
going to you frequently. Read through
carefully. Wire. We are right up to the
minute now on shipments. Can usually
handle the order the day it is received.



C. R. BURR & CO.

Manchester, Conn.

Subscribers to "Nurserymen's Fund for Market Development."

The Rakestraw-Pyle Company

WILLOWDALE NURSERIES

Kennett Square, Penna.

We have a general line of Fruits and Ornamentals. Heavy on Apple and Peach Trees, California Privet, Norway Maples, Silver Maples, American, European and Silver Lindens, Salisburias, Oriental Planes.

"That Bully Good Stock"

"We do not believe that we could say anything more complimentary of the car which arrived today than that it equaled both in quality of stock and packing, the one you shipped us last fall. There is no doubt about it; if you continue to send us the same grade of stock handled in the same manner, we shall have a hard time to see our way clear to place orders elsewhere. We want another car in the fall if you are going to have more of that Bully Good stock."

Our friends who write so generously of our efforts to please them, are entirely willing for us to refer to them anybody who wants confirmation of their letter quoted above.

We print these letters because we want other buyers to know what our customers think of Princeton Products. We aim to produce something different—to grow no more than we can give proper care to, and to deliver trees and plants that fulfill the most exacting requirements of critical retail trade. Our friends quoted here have never asked us for a price, but they have been mighty particular to tell us exactly what sort of stock they want!

We want orders from critical buyers, from the so-called hard-to-please, who want quality and value and are willing to pay for superior stock and service.

For fall, we have a Complete Line, grown for The Trade Only.

Princeton Nurseries at Princeton, in New Jersey

May first.

FRAMINGHAM QUALITY NURSERY STOCK

for

YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Our spring trade list is ready. Have you a copy?

If you have not reserved your share of Framingham Quality stock, act now.

Framingham Nurseries
FRAMINGHAM
MASS.

SURPLUS PEACH

	4-6 ft. 9-16 & up	3½-5 ft. ½-9-16	3-4 ft. ⅜-½	2-3 ft. ¼-⅜
Belle of Georgia	300			
Chairs Choice	50	100		
Champion	1000	1000	1000	75
Carman	500			
Crawford Early	50	75		25
Crawford Late	200	500	500	125
Captain Ede	1500	1000	600	150
Fitzgerald	300	400	100	50
Ford's Late	200	400	400	25
Foster	500	150	75	40
Fox Seedling	200	500	400	
Globe	100	100	75	50
Hiley	200			
Iron Mountain	500	900	700	40
Klondike	150	75	50	15
Matthew's Beauty	75	50	75	50
Mountain Rose	500	500	250	75
Niagara	500	400	250	75
Old Mixon Free	500	500	500	75
Reeve's Favorite	700	500	250	125
Salway	400	400	75	40
Smock	700	400	150	50
Steven's Rareripe	400	100	175	15
Stump	600	400	225	125
Yellow St. John	200	50	15	10

THE RAKESTRAW-PYLE CO.
KENNETT SQUARE, PA.

When writing to Advertisers please mention the National Nurseryman.

PAINESVILLE NURSERIES



THE SEAL

of fair dealing, honest prices, prompt shipment, that means so much to every buyer of nursery stock.

THE STORRS & HARRISON CO.

NURSEYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

The
Preferred
Stock

The
Preferred
Stock

BULLETIN No. 6

Containing new Cellar Counts, was mailed April 24th. Did you receive it? Stock is still dormant and in fine condition. Can be shipped on an hour notice. Good assortments still to offer.

We don't often use "testimonials" because we have never thought that they carried much weight. It would indeed be a sorry business which did not have **some** satisfied customers and, naturally, it is the commendatory letters that are used, not the other kind. We can't claim to **always** please **all** our customers but we are glad to say we usually do,—that is how our business has been built up to its present dimensions. Here are two letters which, for special reasons, we can't resist printing.

This, because of the extreme distance and the unfavorable transportation conditions:

Gilroy, Calif.

"Dear Sirs:

The car of nursery stock was a long time on the way but, thanks to your splendid packing, every tree and plant arrived in perfect condition. And furthermore, the stock was all of nice quality and we are much pleased with it. Thanking you for sending such nice stock and right on time, I remain, with best wishes for the coming year, Truly,"

Max J. Crow.

This, because it quite makes us purr with satisfaction and pleasure:

Norwalk, Conn.

"Received my shipment in fine condition and, like all of the J. & P. stock, it is A. 1 in quality. Many thanks."

R. G. Hanford.

Jackson & Perkins Company
NEWARK - - NEW YORK

Subscribers to "Nurserymen's Fund for Market Development."

The
Preferred
Stock

The
Preferred
Stock

Heikes—Huntsville—Trees



Established 1872

1500 Acres

FRUIT TREES
ROSES and other
ORNAMENTALS

For the wholesale trade.
All of our own growing.

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

An Established Nursery for Sale

On March 13th, 1918, the charter of the P. J. Berckmans Company expired by limitation. The stockholders of the corporation decided not to ask for a renewal of the charter, but to close the affairs of the company. To conform to certain legal requirements, L. A. Berckmans, former President of the corporation, was appointed Receiver, but the receivership in no wise grows out of financial embarrassment, for the corporation is entirely solvent.

Stock, Implements
Good-will for Sale

The Receiver offers for sale all the growing nursery stock, a list of 27,000 live customers, landscape department and outfit, implements, wagons, live stock, and good will. Full details of the property may be secured by addressing

L. A. BERCKMANS, Receiver

For The P. J. Berckmans Co.

Augusta,

Georgia

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of Own Root Roses

ORNAMENTAL TREES SHRUBS

BERRIES CLEMATIS

EVERGREENS PEONIES PHLOX

and

HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY

GENEVA, N. Y.

70 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE

THE

North-Eastern Forestry Co.

CHESHIRE

...Connecticut...

A Pruning Book That Will Build Business for You



Here is a book that will help you by helping your customers.

It is a practical guide to right pruning and growing. It will tell every purchaser of your products how, when and where to prune for the most vigorous and healthy growth.

Knowing the kind of shears to get is equally as important as knowing how to use them. This book will give your customers some helpful information about shears too.

We'll Send You a Copy Free

We have a plan of co-operative selling and advertising of which "The Little Pruning Book" is an important part. It's a plan that will help you sell Nursery Stock and help us sell Pexto Pruning Shears.

You must see the book before you can appreciate the plan. It sells in book-stores for 50 cts., and believe us "It's worth sending for." Furthermore, sending for it does not obligate you in the slightest. It just gives us an opportunity to tell you about our business building plan.

Send for your free copy today.

The Peck, Stow & Wilcox Co.

2189 W. Third Street
Cleveland, Ohio



PRUNING SHEARS

We are now ready to quote lowest prices on
FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries
Sparta, Ky.

For FUMIGATION With
HYDROCYANIC ACID GAS
"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by

The Roessler & Hasslacher Chemical Co.
100 William St. - - - New York, N. Y.

HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

Rawhide Brand of Shipping Tags and Tree Labels

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.
West Chester, Pennsylvania

DO YOU NEED

SPIRAEA ANTHONY WATERER 2 to 2½ ft., and 2½ to 3 ft., bushy.

SPIRAEA THUNBERGII 2 to 2½ ft., and 2½ to 3 ft., bushy.

LONICERA TATARICA, red, white and pink 2 to 3 ft., and 3 to 4 ft.

HYDRANGEA PAN. GLAND. 2 to 3 ft., and 3 to 4 ft.

PERSIAN LILAC 2 to 3 ft., and 3 to 4 ft.

PHILADELPHUS GRANDIFLORUS, **CORONARIUS** and **LEM-OINEI** 2 to 3 ft., and 3 to 4 ft.

VIBURNUM PLICATUM 3 to 4 ft., and 4 to 5 ft.

WEIGELA ROSEA 4 to 5 ft.

SNOWBALL, Common 2 to 3 ft., and 3 to 4 ft.

HIGH-BUSH CRANBERRY 2 to 3 ft., and 3 to 4 ft.

Or any other shrubs. Send us a list of what you require, giving quantities and sizes, and let us quote you. It will be worth while. We have the stock.

SMALL STOCK FOR PLANTING IN NURSERY ROWS.

We have it. The best ever. Did you get our price list? A postal card request will bring it to your office. Stock selling fast. Supply limited. Don't put it off and be disappointed.

Thomas B. Meehan Co.,
WHOLESALE NURSERYMEN

Dresher, - Penna.

Subscribers to "Nurserymen's Fund for Market Development."

You can save **Time and Money**

If you use our neatly packed

SHEET NURSERY BURLAP

Put up in bales

In various size sheets ranging in sizes from 24x24 to 40x40 in.

Write for particulars

Sarachan & Rosenthal

64-66 Hanover Street

Rochester, - - New York

Vincennes Nurseries, W. C. REED, Prop.
VINCENNES, - - INDIANA

Prepare for Spring by securing the best Cherry to be found. Our blocks of Cherry are the largest in the U. S. and quality the best. While the U Boats have been sending Mahalebs to the bottom the past two years, we have been fortunate in securing our usual supply and will have a splendid lot of trees to offer in the following:

CHERRY TWO YEAR general list of varieties

CHERRY ONE YEAR 11-16 up Sweets and Sours

PEACH ONE YEAR leading varieties

PLUM Japans, European and Hansen Hybrids

COMPASS Cherry and Apricots

APPLE leading varieties in connection with other stock only

Grafted English Walnuts and Northern Pecans

Special prices to car lot buyers on large orders

Subscribers to "Nurserymen's Fund for Market Development."

For Fall of 1918

Ornamentals, Shade Trees, Evergreens,
Perennials, Fruits, etc.

A large stock of the following:

Cherry Trees, 2 yr.

Apple Trees, 2 and 3 yr.

Peach Trees, 1 yr.

Norway Maple up to 2 inch.

Am. Elm, all sizes.

Write for special prices on car lots.

C. M. Hobbs & Sons

Bridgeport, - Indiana

Subscribers to "Nurserymen's Fund for Market Development."

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American
Arbor Vitae—Compacta
Arbor Vitae—Douglas Golden
Arbor Vitae—Globosa
Arbor Vitae—Hoveys Golden
Arbor Vitae—Pyramidalis
Arbor Vitae—Siberian
Arbor Vitae—Tom Thumb
Arbor Vitae—Orientalis
Arbor Vitae—Orientalis Aurea
Arbor Vitae—Orientalis Pyr
Austrian Pine
Biota, 3 varieties
Black Hills Spruce
Colorado Blue Spruce
Douglas Spruce

Concolor
Englemans Spruce
Jack Pine
Norway Spruce
Norway Pine
Pinus Mugho
Pinus Flexilis
Pinus Ponderosa
Pitch Pine
Red Cedar
Retinispora, 3 varieties
Swedish Juniper
Scotch Pine
White Pine
White Spruce

Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa

Subscribers to "Nurserymen's Fund for Market Development."

For Spring 1918

We offer a Complete
List of

Shade Trees, Shrubs, Evergreens

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2 1/4 and 4-inch pot-grown in 400 best sorts.

2-year-old field-grown in Hardy Climbers.

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The kind that give satisfaction

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GRAPE VINES—One and two years old. Varieties largely Moore's Early, Concord and Niagara.

Also Scarlet or Crimson Clover Seed and Cow Peas. Free from weed seeds, all re-cleaned and guaranteed first class.

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If you need Everbearing strawberry plants to fill spring orders or if you wish to increase your planting in nurseries, we can supply you with genuine **PROGRESSIVE** Everbearing plants, guaranteed to be **TRUE TO NAME** and handled so as to reach you in best of growing condition. Write for prices.

We have been growing and breeding the Everbearing strawberries for the past eight years and have many new varieties growing in our experimental grounds that are not yet for sale. We invite a personal visit to our grounds during fruiting season, preferably during August or September. The latch string is always out.

THE GARDNER NURSERY CO., Drawer 103, Osage, Iowa.



Not that I think I am good looking but lots of folks want to see what the man looks like with whom they do business. Well, here I am. I haven't changed much since the days when I used to do everything myself—attend to correspondence in the evening and dig and pack orders during the day—all myself, with the help of one hired man. My Evergreen business has grown, but my business policy remains the same, and that is: Give every customer complete satisfaction.

D. HILL.

Hill's Evergreens

SINCE 1855

Many Nurserymen are pushing the Evergreen feature of their business with increasingly profitable results. But it takes time to grow Evergreens to a marketable size. To have a line of good salable stock three or four years hence, you must start now—this Spring. Let us figure with you on your requirements now. Send us your want list for pricing. Ask any questions you want.

Our great specialty for over half a century has been the propagating of evergreens for selling to the nursery trade of this country. Put us to work propagating **your** Evergreens. You will save time, money and temper if you do, for **American grown Evergreen stock** means a lot these strenuous days.

We have, in addition to a particularly favorable, natural situation, the most up-to-date facilities, equipment and skilled workmen obtainable. Here is a partial list of the leading varieties. Write for prices and information.

Abies Balsamea (Balsam Fir)
Abies Tsuga Canadensis (Hemlock)
Abies Concolor (Concolor Fir)
Abies Douglassi (Douglas Fir)
Abies Nordmanniana (Nordman's Silver Fir)
Buxus Sempervirens (Bush Shaped Boxwood)
Buxus Suffruticosa (Dwarf Edging)
Cedrus Atlantica (Atlantic Cedar)
Juniperus Canadensis (Dwarf Juniper)
Juniperus Canadensis Aurea (Gold. Dwf. Juniper)
Juniperus Counarti (Counarti Juniper)
Juniperus Elegantissima Lee (Lee's Gold. Juniper)
Juniperus Glauca (Silver Cedar)
Juniperus Hibernica (Irish Juniper)
Juniper Pfitzeriana (Pfitzer's Juniper)
Juniperus Procumbens (Japanese Trailing Juniper)
Juniperus Sabina (Savin Juniper)
Juniperus Sabina Tamariscifolia (Gray Carpet Jun.)
Juniperus Schottii (Schottii Juniper)
Juniperus Virginiana (Red Cedar)
Larix Europea (European Larch)
Picea Alba (White Spruce)
Picea Canadensis (Black Hill Spruce)
Picea Excelsa (Norway Spruce)

Picea Pungens (Colorado Blue Spruce)
Picea Pungens Kosteriana (Grafted Blue Spruce)
Pinus Austriaca (Austrian Pine)
Pinus Banksiana (Jack Pine)
Pinus Flexilis (Limber Pine)
Pinus Mugho (Dwarf Mugho Pine)
Pinus Ponderosa (Bull Pine)
Pinus Resinosa (Red or Norway Pine)
Pinus Strobus (White Pine)
Pinus Sylvestris (Scotch Pine)
Taxus Baccata (English Yew)
Taxus Canadensis (American Yew)
Taxus Cuspidata (Japanese Yew)
Taxus Cuspidata Brev. (Dwf. Japanese Yew)
Taxus Repandens
Thuya Ellwangeriana (Tom Thumb Arbor Vitae)
Thuya Globosa (Globe Arbor Vitae)
Thuya Hoveyi (Hovey's Golden Arbor Vitae)
Thuya Lutea (Peabody's Golden Arbor Vitae)
Thuya Occidentalis (American Arbor Vitae)
Thuya Orientalis (Chinese Arbor Vitae)
Thuya Pyramidalis (Pyramidal Arbor Vitae)
Thuya Wareana (Siberian Arbor Vitae)
Thuya Woodwardi (Woodward's Globe)

We also have a complete line of young Deciduous Trees and Shrubs, Forest tree seedlings, etc., for lining out.—Write for complete wholesale trade list.

THE D. HILL NURSERY CO., Inc.



EVERGREEN SPECIALISTS
LARGEST GROWERS IN AMERICA

Dundee, Illinois

BOX 401



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When writing to Advertisers please mention the National Nurseryman.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated

Vol. XXVI.

HATBORO, PENNA. MAY, 1918

No. 5

EVERGREEN LAWN SPECIMENS

IF there is one thing more than another that depresses the true plant lover, it is the misuse of evergreens by planters and so-called landscape gardeners. It is bad enough to see the everpresent groups of Retin-

shears.

It is difficult to reason out why such a practice is so general.

If the plants grew better or looked better for the shear-



Tsuga canadensis Sargentii pendula

isporas, Junipers and Thuyas planted closely along porch beds and such like positions, but not content with using them where they cannot possibly grow and look well for more than a few years, they are usually mutilated and shorn of all their beauty by some ignoramus with the

ing they get there would be some excuse, but they do not, it weakens and stunts them and makes them look very uninteresting and forlorn.

If the same amount of time were spent in cleaning out the dead accumulations of twigs and leaves from the in-

teriors of the plants and the growth were judiciously controlled by the pruning knife, we should have very much more beautiful results.

The accompanying illustration shows a fine piece of Sargenti Weeping Hemlock or to give it its full botanical name, *Tsuga canadensis Sargenti pendula*, that has been, fortunately, overlooked by the man with the shears.

The beauty of this plant speaks for itself, and would be a pleasing addition to almost any lawn.

It is not an uncommon remark for the nurseryman's customer to say "They do not like evergreens because they remind them of cemeteries." It is safe to assume that such people have seen few evergreens but those that have been made melancholy looking by destroying their natural beauty.

It would give great impetus to the popularity of this class of plants if small property owners could be induced to try and grow one choice single specimen evergreen well instead of using them as temporary decorative plants.

THE PUBLICITY COMMITTEE'S BOOKLET

The Educational Booklet, published by the J. Horace McFarland Company, Harrisburg, Penna., at the instigation of the Publicity Committee of the National Association of Nurserymen, is an effective entering wedge for the Market Development Movement.

It was to be expected that something good would come from the pen of Prof. L. H. Bailey on any possible subject relating to Horticulture. It is not only good, but Prof. Bailey has accomplished the difficult feat of measuring the lay mind and has so presented the subject that it will be understood, interest and enthuse. Those nurserymen who have tried so hard to interest people in having their grounds fixed up will recognize its educational value.

The editor and publishers are to be congratulated. It is deserving of investigation of every retail nurseryman to distribute among his prospective customers.

Reminiscences of a Nursery Salesman

TAKEN as a whole, I never found that price had much to do with selling plants as the customer seldom has the means or knowledge of comparing them, in fact, the average person buying plants is quite ignorant of their value. They may know the price usually asked for a Rose bush, or fruit tree, but when it comes to the more unusual plants 50 cents is as likely to sound high as five dollars.

Many a time I have been told I was too high priced before having quoted and at such time I knew the statement to mean they feared I was too high. At such times it is well to quote some well known plant such as Privet Hedge, Rose bushes or peach trees, something they are more likely to have purchased before, and then suggest some choice plants, telling them all about them and why they are more expensive.

Occasionally one runs across a well posted man or woman who has studied nurserymen's catalogues as religiously as they ought to have studied their Bibles. It is always a pleasure to meet them because they are interested, and it is only necessary to win their confidence to make them staunch friends, even if they are not big buyers. Perhaps the one fault is they are liable to waste much time, but it is a tactless man who cannot make a chat worth while by getting information as to location of other prospective buyers for such people are invariably acquainted with other plant enthusiasts.

The main thing necessary in handling such people is a thorough knowledge of plants of all kinds, and a sympathetic interest in their fads.

I recall a lady of this type who had a very pretty little bungalow and a large interest in her grounds, limited means and a vague idea, she wanted her grounds to look perfectly natural. Her opinion of nurserymen was not one which was conducive to egotism to the listening

salesman, the principal objection was the nurseryman always wanted to sell formal plants and she "just hated those stereotyped things."

The charge against the nurserymen is necessarily true as he is in the business to sell the goods he raises, and the average salesman does not care to waste time on such prospects. Thinking it was a hopeless prospect, I decided to have a little quiet fun, even if I did waste time and come away without an order.

Instead of urging her to buy, I encouraged her to talk of her own impractical ideas and suggested she go to the woods and collect plants, and not to use the showy things usually grown in a nursery. She confided in me that was just what she had done but had not been very fortunate in getting the Dogwood, Witch Hazel, Red Bud, Spice Bush and such plants to grow, and it was really expensive to hire a man and team. That clump over there had cost her \$28.00 in labor, and look at it, not two plants worth keeping. "Mrs. Doe I can ship you for about \$40.00 the same kind of plants that will grow because they have been transplanted, so you would have saved \$18.00 and look at that awful mess you have there. I presume you wanted to get a bank of Wild Roses, but you never will because the Cat Briars and Couch Grass have possession and will keep it." "What would you do?" "Well, I should have all that cleaned out, root and branch, and make the ground as clean as if I were going to grow a crop of potatoes, then send to the nursery for about fifty plants of *Rosa Carolina*, *lucida*, *setigera*, and a few Sweet Briars, at a cost of say about \$12.50, plant them, avoiding setting them in rows, cut them down, keep the ground clean of weeds for one summer, and then let them go. You will have a bank of wild roses all right." "I do believe you know what you are talking about." "Sure I do I have been studying and practicing that kind

of thing for the last 25 years." "I will let you send them to me."

Another experience was at a fine residence on about an acre of ground, all nicely graded and practically no planting. It looked as if it ought to be good for a \$500 order at the least. Upon getting an interview I broached the subject and found anything but a receptive mood, and was favored with an opinion of landscape gardeners and nurserymen that would not be used as a testimonial in the catalogues, the main grievance being that they always planted too much. The house must have cost twenty or thirty thousand dollars, and was a fine piece of architecture.

The only planting done was two Norway Maples planted on each side of the entrance, just where they would do the most harm. Finding I could not make a sale, I could not resist a parting shot, and said, "You have a beautiful house and I really cannot understand why you wish to hide and spoil the looks of it."

"What do you mean?" "Why those Norway Maples. They are a dense round headed tree and in ten years they will hide the front of the house, kill the grass underneath and create an unlovely condition just where it ought to look the prettiest. If you had selected Pin Oak, Ginkgos, or some other tree that would have harmonized better with the lines of the house and located them off the corners, they would have supplemented the architect's art, instead of spoiling it." Although I did not reap any benefit, I am fairly sure the hint was effective and the next nursery salesman got a more kindly reception.

(To be Continued)

THE P. J. BERCKMANS COMPANY

In our last issue we made note of the dissolution of the well-known firm of P. J. Berckmans Company, Incorporated, Augusta, Ga. This firm has played such an important part in the development of horticulture in the United States that its dissolution deserves more than passing mention, as its works and influence upon horticulture in the United States have been very great.

The original Fruitland Nurseries were founded in 1856 by P. J. Berckmans, who conceived the idea of establishing a nursery in the middle south, a section of the country which at that time had made little progress in science of horticulture. It took a man with a vision, love of the business and enthusiasm to overcome the trials and obstacles that the pioneer was bound to meet. Mr. Berckmans lived to see his vision come true and his business win a reputation for reliability which extended practically all over the States and might be said to have been known over all the world.

The original Fruitland Nurseries were located west of the city of Augusta enjoining the city limits and consisted of about twenty acres. As time went on they expanded until more than four hundred acres were covered with ornamental trees, shrubs, roses, and various kinds of fruits. As the business developed Mr. Berckmans took his three sons, L. A., R. C. and P. J. A. Berckmans into the business with him and who have carried it on under the policy laid down by the founder.

The location of the nurseries was extremely favorable

as it might be described as a meeting place of the flora of the temperate and sub-tropical zones, enabling them to grow a great variety.

The enterprise of the firm will readily be recognized by the great number of plants they tested and disseminated from all parts of the world. Besides being the originators of many valuable fruits and ornamental plants, the following being a list of some of the best known:

APPLES

Hargrove, Heywood, Mrs. Bryan, Wallace Howard.

NECTARINES

Coosa.

PEACHES

Thurber, Picquets, Berenice, Dr. Berckmans, Pallas, Robert, Carson, Hancock, Kent, Mealing, Oriole, Juno, Peento, and Chrysanthemum (double flowering).

Citrus trifoliata (*Poncirus trifoliata*).

BROAD LEAVED EVERGREENS

Othera Japonica, *Elaeagnus Fruilandii*.

CLIMBERS

Celsemium sempervirens flore plena (double yellow Jasmine). Climbing Clothilde Soupert rose.

CONIFEROUS EVERGREENS

Juniperus communis compacta and *Juniperus communis glauca*, two improved forms of the common European Juniper. These were originated and disseminated by them and are far superior to the Irish Juniper; *Thuya Orientalis aurea conspicua* (*Biota aurea conspicua*), *Thuya aurea nana* (*Biota aurea nana*). Berckmans Golden Arbor Vitae, the most popular thuya grown; *Thuya pyramidalis Orientalis* (*Biota pyramidalis*).

The dissolution of this firm is a distinct loss to horticulture especially to that section of the States in which it was located. It is, however, gratifying to know that the name of Berckmans will not disappear entirely from the horticultural world, as L. A. Berckmans and P. J. A. Berckmans, Jr., will continue to do expert horticultural work, the large commercial orchards of Berckmans Bros., Mayfield, Georgia, are owned jointly by the Berckmans Brothers and will continue to receive personal attention from them.

Among the list of names just announced by the War Department, of men who have qualified at the Third Series of Officers' Training Camps at Camp Upton, N. Y., to be listed as eligible for appointment as Second Lieutenants, is Albert F. Meehan. Thomas Meehan & Sons, Dresher, Pa. These men will be carried on the list of eligible officers and commissioned at such times as suitable vacancies occur.

Lieut. Meehan has just been transferred to Camp Gordon, Atlanta, Ga.

F. W. Kelsey, of the Kelsey Nursery Company, 150 Broadway, New York, writes to the New York Sun, suggesting the Government take over the control of fertilizers and he points out this business is one of the essentials in food production and would be a war measure of vital importance.

Restriction on Imports With Reference to Plants and Plant Material

On February 14, 1918, the President of the United States issued a proclamation which required an import license for all articles from all countries. The object of this action is to more clearly supervise commerce and trade during the period of the war. The administration of the work devolves upon the War Trade Board. For some time the Bureau of Imports of the War Trade Board has been giving attention to the manner in which the work of restriction should be carried out. There has recently been published by the War Trade Board a list of restricted imports. This list (No. 1) contains eighty-two items, one of which (Item 61) includes "plants, trees, shrubs, and vines." While plants, trees, shrubs, and vines are on the restricted list, they are not prohibited entry. A license will be required for each shipment of plants, trees, shrubs, and vines from a European port. No shipments will be allowed from Asiatic ports. According to a recent circular issued by the War Trade Board, applicants for license must show certain facts:

"In the case of shipments from European points, the most satisfactory evidence will be proof that shipping space has been actually engaged. The present form of application for import license will generally be found adequate for this purpose, and where this is not found to be the case, a letter setting forth the additional facts should accompany such application.

"The United States Consuls have been instructed not to issue consular invoices on and after April 15, 1918, for the articles mentioned in the list without first being furnished with the number of the import license or being given other evidence of the issuance

"It will devolve upon importers therefore, to advise not to accept for shipment consignments of the articles mentioned in the list without similar evidence of the issuance of the import license.

It will devolve upon importers, therefore, to advise their shipper abroad by letter or cable, of the number of their import license so that such shipper will be able to furnish the same to the consuls and the shipping agencies. This will mean that importers must be diligent in applying for import licenses a sufficient time in advance of the shipment so that the number of the import license may be communicated abroad in ample time."

To summarize—trees, shrubs, and vines, including fruit tree stocks and seedlings, may be imported from Europe, but not from the Orient, upon filing an "Application for Import License." The War Trade Board has issued the following instructions regarding the securing and filling out of application for license.

"(a) A separate application must be made for each importation. Each application should refer only to articles of the same general nature, as hides, mica, leather, rubber, wool, sugar, etc. Observance of

this requirement will facilitate prompt action upon application.

"(b) Applicants are requested, in case of further communication to refer to their own reference number and date as well as to the reference number of the Bureau of Imports, if known, and to refer to each application in a separate letter.

"(c) The statement in regard to the quantity should be made in definite units of net weight or measure as required by customs authorities, such as pounds, bushels, gallons, etc., as well as in such terms as boxes, cases, sacks, etc. Values must be in dollars.

"(d) Applicants are advised to forward their applications as long as possible in advance of the date of arrival. If shipment does not arrive before expiration date of license and an extension is desired, the original application and license must be returned with the request for extension, setting forth the reasons therefore.

"(e) This application should be forwarded to the Bureau of Imports, Washington, D. C.

"(f) Copies of all forms may be secured from the Bureau of Imports, Washington, D. C., or from any branch of that Bureau. Branch offices are located at:
Boston, Massachusetts, 1806 Customhouse.
Chicago, Illinois, 1106 Monadnock Block.
Detroit, Michigan, 225 Post Office Building.
Eagle Pass, Texas, First National Bank Building.
El Paso, Texas, Federal Building.
Galveston, Texas, Federal Building.
Laredo, Texas, 206 Federal Building.
Los Angeles, California, International Bank Building.
Mobile, Alabama, Customhouse.
New Orleans, Louisiana, Canal Bank Building.
New York, New York, 45 Broadway.
Nogales, Arizona, Bowman Hotel Building.
Philadelphia, Pennsylvania, 305 Lafayette Building.
Portland, Oregon, 748 Morgan Building.
St. Louis, Missouri, 1305 Federal Reserve Bank Bldg.
San Francisco, California, 212 Customhouse.
Savannah, Georgia, Savannah Bank & Trust Company Building.
Seattle, Washington, 825 Henry Building."

GEORGIA—FLORIDA PECAN GROWERS' ASSOCIATION

The Georgia-Florida Pecan Growers' Association will hold their annual meeting at Thomasville, Ga., Wednesday and Thursday, May 29th and 30th.

Those interested should apply to W. M. Parker, Secretary, Thomasville, Ga., for program.

A CALL TO ACTION

By Joseph J. Lane of Garden Magazine and Country Life

It is gratifying to note that a body of nurserymen elected themselves to carry out the plan suggested in outline under the title of "A Co-operative Campaign to Create New Business for Nurserymen."

Let us give thanks.

And then, let us proceed to further suggestions, for I believe that the time is right here for us all to put our shoulders to the wheel that the big broad plan of creating more business for all, by co-operating individually to the fullest extent of our abilities, be furthered with the greatest degree of success and rapidity.

Time is short. Life is only a span of years. To-day is the only time we have, these twenty-four hours which God has given us, to use to the fullest.

Let us be active. Let us not delay.

You are a partner in any plan that means bigger business for Nurserymen—because bigger business for nurserymen means bigger business for you. I'll tell you how.

Let us assume the present campaign for funds rolls up a working capital sufficient to start the work of broadening the appreciation of the general public of things horticultural. Magazines and newspapers begin to look upon nurserymen as real live business men, progressive, and aggressive.

The bulletins to the press preaching the gospel of an "America Beautiful" have begun to appear in publications of broad circulation, and advertisements of nurserymen keep pace with the endeavor to cultivate a desire for gardens and grounds of individual beauty and naturalness.

And—more of the same sort. Advertisements over the name of the subscribers to the fund appear in class publications preaching the value of factory planting and restful and financial values of a real planting around the home, the need and results of fruit planting on the home grounds, etc., etc.

What is the result? First, the nurserymen themselves by collectively appealing to the public in a propaganda to foster a deeper and finer appreciation of horticulture, are ennobled themselves and drawn together for the common good. Trade differences, narrowness and selfish competition give way to the millenium of ceaseless co-operation and unified effort along constructive and creative lines that all may be benefited.

(And let me say here, that if no other benefit than this came from the expenditure, it would repay every participant a thousand fold.)

To go on.

The public begins to sense the need of nature in their lives. The inherent desire for beauty and soul-strength that lives in all of us is brought to a point of action. By creating a deeper appreciation in the public mind of the service nurserymen render, nurserymen as a group gain confidence in their occupation and pride in their calling. Instead of remaining individual enthusiasts, they become a group having a noble ideal—the creation of an "America Beautiful."

And increased business begins to come to each of them.

Mass publicity has effectiveness that individual propaganda never dreamt of.

The National Campaign of Public Education of the value of natural beauty in the lives of our people gathers momentum, and lecturers begin to spread the gospel under associated direction. People hitherto inclined to scorn a salesman of flowers or nursery products, send invitations for the same salesman to come and help them prepare planting lists.

And if you do business in allied lines, here is where you come in.

Increasing planting of nursery products has as its fundamental thought the creation of a greater appreciation on the part of the American public of the benefits of garden activity.

Every new enthusiast for gardens, means a customer for you. Fertilizer, Insecticides, Spraying Machinery, Tools, Implements, Tractors, Greenhouses, etc., etc.,—without end.

Every branch of the horticultural industry will be benefited.

Will you help in securing the result?

The nurserymen's fund is the means. You are invited to participate.

We want \$50,000 a year for five years.

Subscribed by May 1st.

Talk has been used.—words have been spent. Now is the time for you to act.

Money is needed. Ideas are needed. One gives birth to the other.

You have read the announcements in your trade papers and letters to you from the committee of nurserymen who have set about gathering the fund.

Let this be your call to action.

You are elected to share in the benefits. Why not share in the programme that will gain those benefits?

As we contribute to the fund individually, just in that proportion will results of a satisfying nature individually be achieved collectively.

This is our call. Are you willing to do your share? Speak up. Now.

A SPLENDID SUGGESTION

In a letter to Stark Brothers Nurseries & Orchards Company, Louisiana, Missouri, Mrs. Sherwin Ray, North Adams, Mass., made a very fine suggestion which is worthy of serious consideration by the nurserymen and the country at large, namely, to start a fund for the purpose of replenishing the devastated regions of Belgium and France with fruit trees. Mrs. Ray believes that every little community could comb out a few dollars that in the aggregate would make the great whole. Every subscription from one cent up will be welcome. The Mayor or public official of each town to choose some way in which the matter may be brought before the community. Of course the idea is only in the raw but Mrs. Ray wishes it brought before the nurserymen of America.

Mr. John Watson in commenting on the suggestion says: "It is so fine an idea and appeals so especially to the nurserymen that I should like to see it taken up and put in the way of execution. May I not suggest further that this excellent idea might be carried out in a very

practical way, and since the Washington Board in charge of imports will not permit French nurserymen to ship trees or seedlings to this country after the present month, and as the present Horticultural Board have called a meeting for the 2nd of May at which nurserymen, orchardists, fruit growers and others may appear, and show cause why the importation of nursery stock and stock from France and elsewhere should not be absolutely and permanently prohibited and as this will deprive the French nurserymen of a market in this country for the millions of seedlings that we in the past have depended on them to supply for the benefit of the nurserymen and fruit growers in this country, it would be entirely proper under the circumstances for the proposed fund to be sent to the French nurserymen. The logical thing would be to buy French fruit trees in France for French planters. It would create in a small measure a market in France for the French stocks that are to be prohibited shipment to this country.

Mrs. Ray's suggestion is too fine to cloak any selfish

thought of ours as growers of trees. If we in this country wish to give new orchards to the French people we can make our generosity serve a double purpose by spending the proposed fund with the French nurserymen, whose market in Europe has been destroyed by the war and whose only remaining market, that of this country, is apparently to be denied them in the future."

At the Philadelphia convention a committee was appointed, F. L. Atkins, chairman, Rutherford, N. J., to consider the possibilities of sending fruit trees from this country to replace the orchards destroyed by the Germans. The idea did not prove practical on account of the difficulties of transportation and the inability of American nurserymen to supply varieties that would be adaptable to that region. Mrs. Ray's suggestion will appeal as entirely feasible and a most practical way of carrying out the original proposition.

Some Definite Suggestions for Fruit Nurserymen Having Stock for Sale

By Joseph J. Lane of Garden Magazine and Country Life

Are fruit nurserymen slackers? Do they intend to ignore means that lie within their power to help America win this war? Do they intend to allow themselves to be put out of business? Or will they get busy and seize the present crisis to awaken America to the realization of a neglected source of food supply? Thus they will help themselves to the biggest selling argument ever presented an industry and by so doing gain for themselves the distinction of being patriotic in the highest degree.

That's a long paragraph—a lot to digest at one reading. You'd better read it again to gain the full force of the questions. The situation is one of utmost seriousness. Will the nurserymen having fruit stock growing in their nurseries awake to a full realization of the crisis our country faces and in which they can be of so great a help?

President Wilson in his memorable message to the American people a year ago, sounded this keynote:

"The world's food reserves are low. Not only during the present emergency but for some time after peace shall have come, both our own people and a large proportion of the people of Europe must rely upon the harvests in America."

This is the condition. What are we doing to meet it?

During the past twelve months the American people have had directed to them the greatest cannonade of publicity on the subject of food production and food conservation in the memory of mankind. War gardens have sprung up everywhere. Canning clubs have gained members with greatest rapidity, and education to new processes has been complete and extraordinarily profitable to the Food Administration.

As facts stand now, no concerted effort has been di-

rected to the subject of food production through the medium of fruit planting. This fact is regrettable. We are already mourning the lack of initiative that allowed such a condition to be possible.

This will be a long war. Conditions of food supply become more important every day. Every day that passes without our determined action to capitalize upon conditions, means just so much more accumulated criticism we will either receive or give ourselves in years to come.

The devastation of the orchards of France are definitely a call to us to greater activities to take up the slackened source of supply and render it more prolific.

First we should help the public to an appreciation of the benefit of planting small fruits—for immediate production of foodstuffs: Raspberries, strawberries, blackberries, currants, gooseberries and grapes.

If we neglect this, we will place ourselves liable to the criticism of being unpatriotic—and will deserve the title.

Next we must in our advertising and sales methods, convince the people of the present need of planting fruit trees for the food they will bear in years to come. Past methods are gone and forgotten. We are facing a new era in the history of life in this country, and the world over.

I do not claim to be a prophet, nor the son of a prophet, but I do assert that if fruit nurserymen do grasp these facts as here presented and as their thoughts will lead them to realize, and act to achieve the ideal in fruit planting in their country, they will draw to themselves one of the greatest sources of constant revenue that has ever been offered the industry.

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by
THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance	\$1.50
Foreign Subscriptions, in advance	\$2.00
Six Months	\$1.00

Advertising rates will be sent upon application. Advertisements
should reach this office by the 20th of the month previous to the date
of issue.

Payment in advance required for foreign advertisements. Drafts
on New York or postal orders, instead of checks, are requested by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., May 1918

Subscribers to "Nurserymen's Fund for Market Development"

PREPARE
FOR THE FUTURE

Values have changed so rapidly since the world war began that it is difficult to adjust ourselves to the new present conditions, and still more so to forecast and to prepare for the future.

There have been more beliefs, ideas and notions gone to the scrap heap than ever before in the world's history, and it is absolutely necessary that we quickly adjust ourselves to the new lines of thought and action that are dominating the world.

Some look for the end of all things, others look for the millenium, but as likely as not this old world will keep on going for a few more centuries, giving mankind an opportunity to work out its own destiny, along perfectly natural lines.

While it is useless to worry as to what is in the future, the nurseryman at least has his daily work to do and as he grows trees and plants that take several years before he can exchange them for bread and butter, he must naturally figure a little ahead.

Prophesying is usually an unprofitable occupation, and one man's guess is as good as another. There are some things, however, that are obviously going to influence the nursery business and it is well to measure as near as possible their probable effect and be prepared to act accordingly. Everyone who is familiar with the action of the Government through the agitation of the entomologist feels pretty sure that in the near future there will be laws prohibiting all imports of plants, without entering into the pros and cons of the necessity of it, the nurseryman who plans the future with this prospect in mind is only taking ordinary precautions. There are evidently some concerns, such as Cottage Gardens Nurseries who have established an eight hundred acre nursery establish-

ment in California with the avowed purpose of raising that kind of stock which hitherto was being imported from Europe, who have realized it for some time. Such foresight is merely a good grade of business sense.

Another thing that will have an influence on the business is the fact that nurserymen themselves are waking up to the necessity of advertising in a national way.

Was there ever such an object lesson as the Liberty Loan if we are not too stupid to learn it, and it is a safe guess that if National Advertising assumes any proportions, the demand for nursery stock will increase tremendously.

Another phase of conditions that will more or less affect the business is a change in values. I do not mean by this money values. We are still apt to think in terms of dollars and dimes, but it is hardly possible to slander the manhood and womanhood of those who have gone over to fight in the world war by accusing them of this. We know for sure they value something more than money and this of itself would indicate that a business built purely on mercenary lines and motives is not the business of the future. Another thing that will affect the future is the cessation of production and wastage of war. The business will not only have to catch up lost time, but will have to make tremendous strides in the science of horticulture to keep shoulder to shoulder with the march of progress in other lines.

It has been truly said that under the present conditions, nurserymen may be said to be hanging on by their teeth, but the change is liable to come at any moment when every nerve will have to be strained to keep in the front ranks of production of their particular line.

ECONOMICS OF THE SITUATION

Alba B. Johnson, President of the Baldwin Locomotive Works, Philadelphia, in concluding his address before the United States Chamber of Commerce, spoke of the admittedly inadequate motive power of our present equipment as follows:

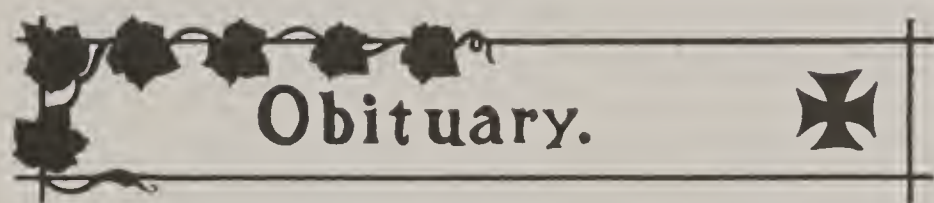
"During the depression preceding the war there was a small surplus of power which, as should have been foreseen, would be absorbed in traffic with the first increase of activity. As a rule, railroads have purchased locomotives largely under the spur of excessive traffic and have abstained from purchasing during periods of reduced earnings. This is contrary to the economics of the situation. Enlargements of facilities should be made in times of depression, first, that is the cheapest time to do it; second, it is the most convenient time to do it; and third, it is the time when the managers can give most attention to doing it; and fourth, the employment of labor arising out of large railway purchases tends to mitigate the severity of a general depression. The reason the railroads have not done this since 1907 is that under the regulatory policy which went into effect at the time, railway managers have not been able to accumulate surpluses sufficient in their judgment to warrant bold construction in times of small earnings, and especially because future earnings have not been susceptible of approximate calculation even where the volume of traffic could be estimated in advance. Adequate provision of motive power, like adequate provision of other rolling-stock and other facilities, can only be assured when Con-

gress places upon the functionary charged with the duty of regulating rates, the definite responsibility of making such rates as will yield earnings sufficient for thorough maintenance, for adequate improvements and sufficient to attract the capital necessary for providing additions and extensions."

This diagnosis and prescription might be applied to any business, it is a basic truth, and is especially applicable to the nursery business at the present time.

Present conditions are not going to last and during the present depression in our particular line is the time to go the limit in preparing for the tremendous demand that is sure to come, perhaps more quickly than we have any idea of.

If lack of confidence, capital and labor prevents, then at least plan for expansion and high pressure methods of production.



Obituary.

HARRY MICHELL

Harry Michell, son of Frederick J. Michell, of the firm of Henry F. Michell Company, seedsmen and nurserymen, Philadelphia, Pa., was drowned in France, on April 7th. Mr. Michell was 22 years old and a member of Company B, Nineteenth Engineers. Mr. Michell went to France early in the war and is supposed to have been fighting with the American Engineers that gave the Germans such a battle in the recent Drive, and about which so much has been published in the newspapers. Mr. Michell graduated from public school and then went to Pennsylvania State College where he studied scientific agriculture for two years. He was an extremely bright and energetic young man of great promise, and will be sadly missed at his home in Ridley Park, Pa., where he was a general favorite.

INVENTOR OF PLANET, JR., FARM AND GARDEN IMPLEMENTS DIES

S. L. Allen, the father of modern Garden Seeders and Cultivators succumbs at Miami, Fla., in his 77th year

The passing of this pioneer in the agricultural implement business of the country recalls the story of an interesting career. Back in the early seventies Samuel L. Allen was a farmer. This was when planting was done by hand, and hoeing was accomplished with the primitive hand-hoe. Not content with the laborious methods in use at that time this man did some real thinking as to how he might make his work lighter, and if possible accomplish more. Being of an inventive turn of mind he set about experimenting, and finding no implements then in use that could be made to do his bidding, he betook himself to the village blacksmith, and there gave expression to his ideas of what he wanted. He had the smith mould his ideas into practical implements that would save him labor on his farm.

This was the beginning. His ideas worked so success-

fully that he was encouraged to make further inventions. His neighbors also wanted implements that would save them labor, and before long Samuel L. Allen found himself a manufacturer of agricultural implements.

Realizing the larger field of activity in this vocation, he established a plant at Philadelphia for the manufacture of Planet Jr. farm and garden implements, as he called them. For nearly half a century this business has continued to grow, under the trade name, S. L. Allen & Co., until now the plant covers many acres and Planet Jr. implements are used all over the world. They are a particularly important factor now in meeting the necessity for increased food production both here and abroad.

The business which Mr. Allen so firmly established by the quality of his product will be continued without interruption by his associates.

Samuel L. Allen builded better than he knew, and has become a distinct benefactor to mankind, the extent of whose helpfulness will become more and more apparent with the passing of the years.



From the U.S.D. & A.

Destroy Berberis vulgaris and varieties in wheat growing Districts.

An effort is being made to produce the largest possible amount of food from our present acreage in the United States and to accomplish this we must eliminate as far as possible the destructive factors of the grain industry.

Conservative estimates on last year's crop place the loss from the rust disease alone at 5% of the total crop and something must be done to decrease this amount.

The rust is a parasitic plant that requires the vulgaris barberry (common) as an alternate host to complete its life cycle, therefore the only control we have of this destructive parasitic rust plant is the elimination of all vulgaris barberry. This includes purpurea (purple) which also has the rust growth on its leaves like other vulgaris.

We are fortunate that the vulgaris is not as popular as thunbergii or canadensis which are not hosts to the rusts but because the latter so closely resembles vulgaris, some vulgaris has been sold for canadensis.

The campaign to control the rust disease urges the elimination of all vulgaris in nurseries, cities (parks or private hedges) or wherever it has been planted. This must be done before the leaves attain their size in the spring as the rust growth on the vulgaris leaf is for a few weeks only in early spring and by cutting the vulgaris early something can replace it without the loss of a hedge for the year.

The British Government has agreed to purchase one thousand eight hundred tons of Australian evaporated apples for shipment at the rate of three hundred tons a month from March to August of the current year. The price is 15 cents per pound.

Subscribers' Organization of Nurserymen for Market Development

A Co-operative National Campaign to Create New Business for Nurserymen

Temporary Committee: F. L. Atkins, President; E. S. Welch, Treasurer; John Watson, Secretary; J. Edward Moon, Robert Pyle, Henry B. Chase, Paul C. Stark. Aim: To raise a fund of \$50,000 a year for 5 years

Purpose: To create a larger demand for nursery stock of all kinds.

"It ain't the guns nor armament
Nor funds that they can pay,
But the close co-operation
That makes them win the day.
It ain't the individuals
Nor the army as a whole,
But the everlastin' teamwork
Of every bloomin' soul."

RUDYARD KIPLING.

All those interested in the Market Development have reason to feel greatly encouraged at the results so far achieved. We must remember that the total mentioned, and that even these individual subscriptions pledged are merely tentative and by way of suggestion only. The main object being to bring together those nurserymen favorable to a co-operative movement for Market Development, in some sort of an organization for the purpose of a campaign along this line. The response has been prompt and generous and almost without invitation, which shows the majority of nurserymen favor the movement. The committee has sent out few letters and circulars, the trade papers have mentioned it, yet with this small effort a total of \$15,000 a year for five years, \$75,000 in all, or approximately a thousand dollars a day for the time this Committee has been at work, has been promised, and all this without a dollar's expense to the subscribers. It will be seen by examination of the list that it is a very representative one, and it is to be hoped that when the movement gets fairly under way all nurserymen in the country will become subscribers.

The following are a list of those who have promised subscriptions to date.

\$50,000 is the goal. When this amount is promised the organization will begin to act.

	Amt. per Year for five Years
Adams Nursery Co., J. W., Springfield, Mass.	\$100.00
American Nurseryman, Rochester, N. Y.	10.00
Andorra Nurseries, Chestnut Hill, Penna.	250.00
Augustine & Co., Normal, Ill.	25.00
Aurora Nur. Co., Aurora, Ill.	50.00
Backes, H. J., Humphrey, Nebraska	20.00
Baird & Hall Nursery, Troy, Ohio	15.00
Baker Bros. Co., Fort Worth, Texas	25.00
Barr, B. F., Lancaster, Penna.	25.00
Barrett & Son, Benj., Blue Anchor, N. J.	5.00
Beaudry Nur. Co., W. E., Chicago, Ill.	25.00
Bernardin, E. P., Parsons, Kansas	50.00
Bobbink & Atkins, Rutherford, New Jersey	250.00
Brand Nur. Co., Faribault, Minn.	50.00
Brandley, James, Walpole, Mass.	25.00
Breck-Robinson Nur. Co., Lexington, Mass.	100.00
Breed, E. W., Clinton, Mass.	25.00
Burr & Co., C. R., Manchester, Conn.	250.00
Bryant & Son, A., Princeton, Ill.	50.00
Chanute Nurseries, Chanute, Kansas	5.00
Chase Co., Benj., Derry, N. H.	100.00
Chase Nursery Co., Chase, Alabama	250.00
Clarke, Daniel, Fiskeville, R. I.	50.00
Clinton Falls Nur. Co., Owatonna, Minn.	150.00
Conard & Jones Co., West Grove, Penna.	250.00
Corn Belt N. & F. Association, Bloomington, Ill.	50.00
Cumberland Nurseries, Winchester, Tenn.	?
Dansville Wholesale Nurserymen, Dansville, New York ..	50.00
Deerfield Nur. Co., Medford, Minn.	?
Elm City Nursery Co., New Haven, Conn.	100.00
F. & F. Nurseries, Springfield, New Jersey	250.00
Fancher Creek Nurseries, Fresno, California	50.00
Farr, B. H., Wyomissing, Penna.	25.00
Ferris, Earl, Hampton, Iowa	25.00
Hank & Son Nur. Co., Hankinson, N. D.	50.00
Harris, S. G., Tarrytown, N. Y.	50.00
Harrison & Sons, J. G., Berlin, Maryland	500.00
Harrison Nursery Co., York, Nebraska	50.00
Heurlin, Julius, So. Braintree, Mass.	50.00
Hicks & Son, Isaac, Westbury, New York	250.00
Hill Nursery Co., D., Dundee, Illinois	100.00
Hillenmeyer & Son, H. F., Lexington, Kentucky	25.00
Hobbs & Sons, C. M., Bridgeport, Indiana	100.00
Holsinger Bros., Rosedale, Kansas	50.00
Hoopes, Bro. & Thomas Co., West Chester, Penna.	250.00
Howard Lake and Victor N. Co., Howard Lake, Minn.	?
Hunt & Co., W. W., Hartford, Conn.	25.00
Ilgenfritz & Sons Co., I. E., Monroe, Michigan	250.00
Ingals, Irvin, Lafayette, Ill.	25.00
Jackson & Perkins Co., Newark, New York	250.00
Jewell Nursery Co., Lake City, Minn.	150.00
Jones, J. F., Lancaster, Penna.	10.00
Kelsey, Harlan P., Salem, Mass.	100.00
Kelley & Sons, J. O., Jefferson, Ala.	10.00
Keystone State Nursery Co., Pittsburgh, Penna.	25.00
Klehm's Nur. Co., Arlington Heights, Ill.	50.00
Kohankie, Martin, Painesville, Ohio	50.00
Leesley Bros., Chicago, Ill.	50.00
Littlefield & Wyman, No. Abington, Mass.	20.00
Lovett, J. T., Little Silver, New Jersey	100.00
McColgan Nurseries, Red Bank, New Jersey	10.00
McCormack, J. J., Lowell, Mass.	25.00
McFarland Co., J. Horace, Harrisburg, Penna.	250.00
McHutchison & Co., New York, N. Y.	500.00
Maloney Bros. & Wells Co., Dansville, New York	50.00
Marshall Brothers Co., Arlington, Nebraska	50.00
Massachusetts Nurserymen's Association	100.00
Meehan Co., Thomas B., Dresher, Penna.	250.00
Momm's Cons Co., Irvington, New Jersey	10.00
Moon Co., William H., Morrisville, Penna.	250.00
Mount Arbor Nurseries, Shenandoah, Iowa,	250.00
Mourt Hope Nurseries, Lawrence, Kansas	50.00
Muller, Adolf, Norristown, Penna.	50.00
Naperville Nurseries, Naperville, Ill.	50.00
National Nurseryman, Hatboro, Penna.	50.00
Northwest Nur. Co., Valley City, N. D.	50.00
Parker, Jim., Tecumseh, Okla.	10.00
Pennsylvania Nursery Co., Gerard, Penna.	25.00
Peyton, T. R., Boonville, Missouri	10.00
Pfaender, William, New Ulm, Minn.	?
Pierson Corporation, A. N., Cromwell, Conn.	100.00
Plainfield Nurseries, Scotch Plains, N. J.	25.00
Prairie Nur. Co., Estevan, Sask., Canada	100.00
Princeton Nurseries, Princeton, New Jersey	250.00
Rakestraw-Pyle Co., Kennet Square, Pa.	50.00
Reed, W. C., Vincennes, Indiana	50.00
Roehrs Co., Julius, Rutherford, New Jersey	100.00
Root, J. W., Manheim, Penna.	10.00
Rose Hill Nur. Co., Minneapolis, Minn.	50.00
Saddler Bros., Bloomington, Ill.	50.00
Shenandoah Nurseries, Shenandoah, Iowa.	250.00

	Amt. per Year for five Years
Sherman Nursery Co., Charles City, Iowa	150.00
Simpson & Sons, H. M., Vincennes, Ind.	20.00
Smith Co., W. & T., Geneva, New York	250.00
Sonderegger Nurseries, Beatrice, Nebraska	50.00
Stark Brothers, Louisiana, Missouri	250.00
Stein, Geo. E., Wrightsville, Penna.	5.00
Storrs & Harrison Co., Painesville, Ohio	150.00
Swain Nelson & Sons Co., Chicago, Ill.	50.00
Swan River Nurseries, Patchogue, N. Y.	35.00
Texas Nursery Co., Sherman, Texas	250.00
Thomas & Son, Jos. W., King-of-Prussia, Penna.	25.00
Thurlow's Sons, T. C., West Newbury, Mass.	100.00
Tolleson Nur. Co., Lake City, Minn.	25.00
Uecke, Robert C., Harvard, Ill.	10.00
U. S. Nursery Co., Roseacres, Miss.	100.00
Vanicek, V. A., Newport, Rhode Island	100.00
Van Lindley Nursery Co., J., Pomona, N. C.	250.00
Waxahachie Nur. Co., Waxahachie, Texas	100.00
Weber & Sons Nursery Co., H. J., Nursery, Mo.	50.00
Wedge Nur. Co., Albert Lea, Minn.	150.00
Welch, E. S., Shenandoah, Iowa	250.00
Westover Nursery Co., Clayton, Missouri	50.00
Willis & Co., A., Ottawa, Kansas	50.00
Will & Company, Oscar H., Bismarck, S. D.	25.00
Williams, Miss Rose, Newark, New York	10.00
Wohlert, A. E., Narberth, Penna.	25.00
Wright, George B., Chelmsford, Mass.	25.00

SUBSCRIBERS' ORGANIZATION FOR MARKET DEVELOPMENT

Nurserymen are not the only business men interested in developing the nursery trade. There are others, such as producers of our requisites and especially publishers, who already are accustomed to the idea that a business of any kind must be built on SERVICE.

In the natural course of their intent to be of service to us as Nurserymen, they have made helpful suggestions.

The following—prepared for a group of Western Nurserymen last winter—is of unquestioned value to all Nurserymen. It points out the experience of other industries of associations of businessmen. These men were pioneers in a great new country. Their experience should be a guide for us. They broke into a new field and won out. The same untried and untilled fields lie fallow to us. Nurserymen, please take note:—

NATIONAL EDUCATIONAL PROPAGANDA NEEDED

"The nurserymen themselves have been talking for some years about a national advertising campaign to be carried on by the American Association of Nurserymen. You have a conviction, no doubt, that the great work needed to build up a larger demand for nursery stock is educational or missionary work which will mold public opinion and create new desires for the trees and plants that you are producing or the things that these trees and plants will themselves produce.

Each of you realizes that individually you cannot afford to do this missionary work. You know that when you spend money for educational work to mold public opinion, all of the other nurserymen in the territory you influence will profit by your work just as much as you will. If you represent one of a hundred different nurserymen in your territory, then you will get about one one-hundredth of the result from such educational work. So you have a right to look at the proposition from a selfish standpoint and to conclude that you must spend your money for immediate results, ninety percent of which may come to you direct. None of you can afford to spend your money in work that will benefit your competitors as much as it will you.

Now, this brings us to the proposition that if all of the nurserymen would chip in together to support a campaign of education which will create new desires on the part of the public for your stock, then since you will all participate in the results you can afford to do it. You can subscribe to such work in proportion to the amount of business you are doing. Anything that will increase the general demand for nursery stock and enable

you to sell out clean and get good prices is certainly well worth your attention.

IS A WORK FOR THE ASSOCIATION

This idea is not new either. The proposition that your association should put on a national campaign of advertising has been discussed for several years. It was thought by a good many and even by your president, I think, that definite arrangements for a national campaign would be effected at the Philadelphia convention. While the subject was touched upon briefly there, for some reason it was not thrashed out thoroly and no action was taken. In fact, one of the speakers on the subject, and a publisher at that, even discouraged the idea of a national advertising campaign for the nursery industry. To me his reasons for offering this discouragement were rather surprising. He intimated that the nursery business was not well enough developed, and that the association was not old enough or something along that line. Now, if the nurserymen of America are not ready to take advantage of an increased demand for nursery stock and a consequent increase in prices, then it would look to me as tho they were rather a strange race of business men.

IS TIME TO TAKE ACTION

The fact of the matter is that as I have already said, the nurserymen have been talking about finding markets for their surplus stock and getting better prices for the past fifty years, and it is surely about time that they take some definite action along lines that promise practically certain results.

The American Association of Nurserymen is about forty-five years old and has a membership of nearly 500. It is to my mind, both old enough and large enough to do something to develop a bigger market for the products of its members. In fact that might be said to be one of the chief excuses for its existence, because most anyone can solve the problems of growing more stock.

While I was corresponding about the possibilities of an advertising campaign for you nurserymen last winter with your president and with Mr. Favor and others, I believe it was Mr. Favor who suggested that I should write to various associations over the country who have conducted national advertising campaigns. So we did write to them and ask for statements as to what they had accomplished and whether or not they could recommend national advertising for the nursery industry. I think you will be interested in their replies and will therefore read them.

THE AMERICAN JERSEY CATTLE CLUB EXTENSION DEPARTMENT

March 21, 1917.

Successful Farming:—

Enclosed herein you will find a copy of Mr. MacMonnies' article, "Stimulating Dairy Farming With Advertising." This article appeared in a recent number of "Advertising and Selling," and we believe that this will give you as much information about the Jersey Cattle Club's Advertising Campaign as we can provide.

I am also sending you a proof sheet of some of the advertisements which have appeared regularly in farm papers including "Successful Farming," and they will give you an idea of the tone of our advertising copy. While we propose to have a complete new set of advertisements for the coming season, our line of arguments will not be changed materially as this series of ads have been productive of results.

We have been receiving an average of 20,000 inquiries a year from about 75 farm papers. There are many associations thru out the country which are now taking up national advertising and we have noticed that while many of the campaigns differ in the method of execution, there is something to be learned from every individual campaign. It seems to me that the campaign of the American Nurserymen's Association to stimulate the buying and planting of fruit and shade trees should be one of exceptional opportunities and will undoubtedly result in a great increase in the amount of nursery stock sold each year.

If there are any questions which you would like to ask about our campaign, we will be glad to answer them to the best of our ability.

Cordially yours,
THE AMERICAN JERSEY CATTLE CLUB,
(Signed) A. L. Lichane.

ALL:CK

HOLSTEIN-FRIESIAN ASSOCIATION

Successful Farming:—

Your letter of the 14th instant requesting information relative to the advertising of the Holstein-Friesian Association, and addressed to Mr. F. L. Houghton, Secretary, has been referred by him to the writer.

The results obtained by the Holstein-Friesian Association's

total expenditure of \$123,000—for advertising since 1908, can best be comprehended by the following brief statements of fact.

1—Membership has increased from 1,300 to 11,000, or more than 7,000 more than the combined memberships of all other dairy cattle breeders' associations. The increase in 1916 was 1,260.

2—During the fiscal year ending April 30, 1916, 142,120 certificates of registration of pedigrees and transfers were issued by the secretary's office, producing a gross revenue of \$158,994.

3—The Holstein-Friesian Association has a surplus of \$400,000.

4—To its advanced Registry Office in 1916, were reported 11,868 records of official time tests. These figures of but one division of this department, give an adequate idea of the interest and enthusiasm of the membership.

5—The average auction price of purebred registered Holstein-Friesian cattle has advanced from \$150 to \$250.

6—There are half a million purebred registered Holstein-Friesian cattle in America and the breed was not introduced into this country until 1866.

The foregoing enumeration of some of the more impressive results of good advertising should be an incentive and an inspiration to any forward looking association, such as must be the American Association of Nurserymen, referred to in your letter.

The writer, who originated the Holstein-Friesian advertising plans and policy, and who has conducted the publicity from its inception, would particularly urge that a successful advertising campaign for the American Association of Nurserymen, must be based upon a correct analysis of condition and a sane expenditure of whatever appropriation is available.

It is obvious that while the general principles employed in Holstein advertising would hold true in all cases, the particular advertising policy, style of copy, and various details for the Nursery Association must be well thought out and a publicity corner-stone laid which will be dependable for all time.

Yours very truly,

A. W. Ellis Company,
(Signed) A. N. Ellis.

AWE:M

WHITE PINE BUREAU

St. Paul, Minnesota, March 20, 1917.

Successful Farming:—

Our White Pine Bureau National Advertising Campaign—while it has been in effect less than two years—is beginning to be felt to a surprising degree in all branches of the industry. What has been accomplished is but a small part of what we know it will eventually accomplish, not only for White Pine but in the interests of the general proposition of better lumber merchandising.

Our advertising fund is subscribed to by about twenty of the principal White Pine manufacturers of the Lake States and of Idaho, on the basis of ten cents per thousand feet board measure of the amount manufactured, giving us a working fund of approximately \$100,000 a year.

A large part of the success of any association advertising campaign lies in the method by which it is handled. All matters of White Pine advertising are handled by an advertising committee of five members—the chairman of which committee devotes his entire time to the work at a stipulated salary. All matters of medium selection and the preparation of copy are left entirely to our advertising agents—The George L. Dyer Co. of New York and of 721 First National Bank Bldg., Chicago. All inquiries that result from our advertising are immediately referred to the local retail lumber dealers in the localities in which they originate.

We are great believers in advertising—that is, good advertising. We believe it is a very essential part of modern selling.

If the few facts we have given you will be of interest to the Associated Nurserymen, they are certainly welcome to them.

Very truly yours,

WHITE PINE BUREAU,
(Signed) C. L. Hamilton.

CALIFORNIA FRUIT GROWERS' EXCHANGE SUNKIST ORANGES AND LEMONS

Los Angeles, California, March 19, 1917.

Successful Farming:—

We have your letter of the 14th and are very glad to be able to serve you. Sunkist advertising has four distinct aims:—

- 1—To increase the demand for oranges and lemons rapidly enough to keep pace with the increase in production.
- 2—To place the market for lemons as well as oranges, on a year 'round basis.
- 3—To make the "Sunkist" brand synonymous with good oranges and lemons in the minds of consumers.

- 4—To make it easier for people to purchase and more desirable for dealers to "push" these fruits in greater volume, but with a lower margin of profit.

You will note that the whole industry profits by our advertising as it is effected by aims 1, 2, 3 and 4, but that Sunkist alone benefits by aim 3.

It is planned to spend \$400,000 this year in advertising Sunkist Oranges and Lemons. National magazines, newspapers and trade journals are being used.

Magazines are used to increase the general year 'round demand. The keynotes of the advertising are the healthful and delicious qualities of oranges and the usefulness of lemons.

Newspapers stimulate the immediate demand. They suggest to the housewife to buy today. They are also useful for special campaigns.

Trade journals help to gain the cooperation of jobbers and retailers. No product which depends on the trade for its distribution can make most of its advertising unless the distributing factors cooperate.

Dealer service work is also effective, ten men in six cities work with retailers. They have nothing to buy but good will and nothing to sell but ideas. They decorate windows, distribute display material, and talk lower margins and special sales.

The advertising appropriation is obtained by a charge of \$.25 per box on oranges and \$.04 per box on lemons on the year's shipments as estimated January 1st.

Definite results are difficult to obtain on a proposition of this nature. They can only be seen over a long period of time. During the period from 1910-1917 acreage increased twenty-two per cent, consumption increased seventy-seven percent, while population increased eleven and eight-tenths percent. So the consumption of oranges and lemons increased between six and seven times as fast as the population.

This gives you an outline of Sunkist advertising and if there are other questions please write us.

Very truly yours,

(Signed) Don Francisco,
Advertising Manager.

DWJ:F

Now, in concluding, I would just like to refer again to what Mr. Watson said in Philadelphia and express my hope that the members of the American Association of Nurserymen will not use up fifty years more or even fifty weeks more in just talking about these things. The prevailing spirit of business in these times is cooperation and it is time for the nurserymen to believe in that word. Just take a United States dollar out of your pocket and read on it the words "E Pluribus Unum" and in these times of stress accept it as a fact that in union there is strength. By uniting and financially backing a national campaign to mold public opinion in favor of your goods I believe you can avoid the brush pile most of the time in the future, maintain prices at a respectable level and bring prosperity to all of you and I hope you will do it.

Extracted from address by F. J. Wright, of Successful Farming, December 5, 1917. Des Moines, Iowa.

The Cottage Gardens Nurseries, Incorporated, of Eureka, California, are offering capital stock to the amount of \$300,000.00, shares \$100.00 each. Judging by the prospectus, this concern is one of the most promising and business-like nursery companies that has been established in the United States.

Primarily the object of this Company is to grow those plants, bulbs, etc., that have hitherto been imported from the old country by the million annually, such as Azaleas, Rhododendrons, choice conifers, and bulbs.

Previous to establishing the nursery, experiments were carried out to prove the adaptability of climate and soil and judging from results success is assured. We have all recognized for a long time that we have both climate and soil somewhere in the United States suitable for growing practically everything that we import, but it took a man with knowledge and enterprise such as Mr. Ward, of the Cottage Gardens, Long Island, New York, to act.

JAPANESE WEeping CHERRY

The Japanese Weeping Cherry is one of the handsomest of the early-flowering trees. It comes into bloom as soon as the weather permits in spring, usually running a close race with *Magnolia conspicua* and the Golden Bell.

The picture shows a fine specimen grafted about twenty-five years ago, and to all appearances it looks as if it were good for another twenty-five years, although



Prunus subhirtella pendula
(*Cerasus Japonica rosea pendula*)

most of these ornamental flowering trees are usually considered somewhat short-lived.

Among the trade, it is known as *Cerasus Japonica rosea pendula*, but according to Bailey's Cyclopaedia, its correct botanical name is *Prunus subhirtella pendula*.

It is a good seller and seldom found in surplus, although it is not an easy tree to handle, as it is difficult to pack and ship without breaking. According to Bailey, it does not thrive on European stocks, but should be grafted on upright forms of the same species.

ELECTRICAL TREATMENT OF SEEDS AND GROWING CROPS

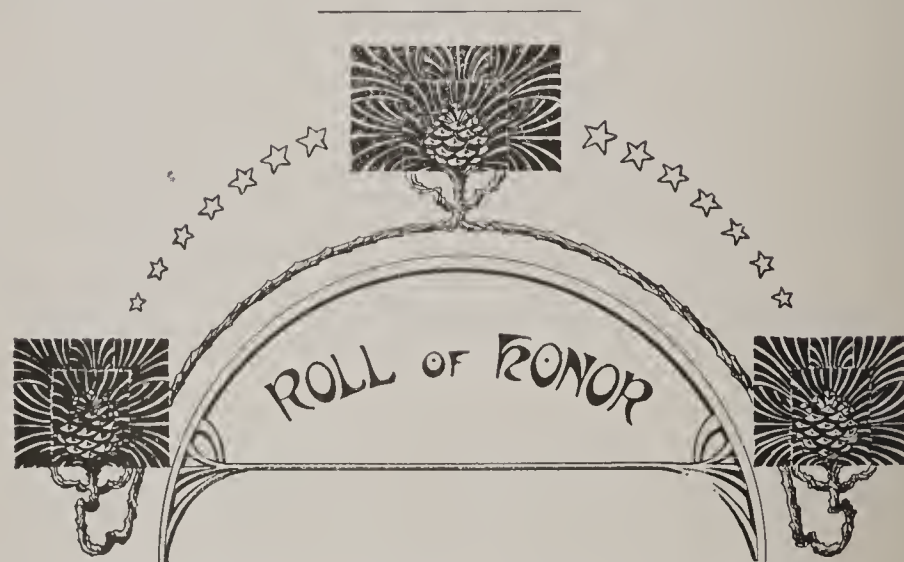
Consul E. Haldeman Dennison, Birmingham, England, March 7.]

The English press is manifesting considerable interest at present in the question of the application of electricity to agriculture as a means of increasing the supply of home-grown foodstuffs. Experiments which have been

going on for some years in England have clearly demonstrated that the use of an electric discharge has a marked effect on crop production.

The subject has lately been brought to the fore by Dr. Charles Mercier, who, writing to the London Times, states that "great and startling improvements in agriculture are on the point of being introduced," and says that a method has been devised to overcome the difficulty of expense of electrification, as applied to both the growing crops and the seed before it is sown. Installations at which farmers can have their seeds treated by experts have been erected at several centers, and are capable of treating some 30,000 sacks per month. The increase of yield from seed so treated, though not so great as the increase from electrification of the growing crops, is stated to be considerable, ranging from 25 per cent. to as much as 80 per cent.

A good deal of experience has been gained by the Agricultural Electric Discharge Co., which makes much of its electrical apparatus in Birmingham, and the wider attention now called to the subject no doubt will result in a great development. The cost of installation is said to be by no means prohibitive and the power required is very small.



IT is the purpose of the National Nurseryman to publish a roll of honor consisting of the names of those nurserymen serving in the United States army in the present war. We shall appreciate it if our readers will send us their names and photographs if possible.

- Albert G. Allen, Cadet, Flying Squadron, Park Field, Memphis, Tennessee. Member of firm of W. F. Allen Company, Salisbury, Maryland.
- Howard E. Andrews, U. S. Signal Corps, France—Landscape Department, A. W. Smith Co., Pittsburgh, Pa.
- Carroll A. Bagby, Capt. U. S. Infantry—New Haven Nurseries, New Haven, Mo.
- Harold J. Bagby, Enlisted Medical Reserve Corps—New Haven Nurseries, New Haven, Mo.
- Lew. W. Bagby, Lieutenant (Junior Grade) U. S. Navy—New Haven Nurseries, New Haven, Mo.
- Oliver W. Bagby, Lieutenant, U. S. Navy—New Haven Nurseries, New Haven, Mo.
- Ralph B. Bagby, Lieutenant 21st U. S. F. A., Fort Riley, Kansas—New Haven Nurseries, New Haven, Mo.
- Robert E. Bagby, Cadet, Senior Class, United States Military Academy—New Haven Nurseries, New Haven, Mo.
- Marvin T. Carter, Royal Palm Nurseries, Oneco, Florida.
- William B. Carter, Royal Palm Nurseries, Oneco, Florida.
- John H. Chattin, Aviation Section of the Signal Reserve Corps, San Antonio, Texas. Secretary and Treasurer of the Winchester Nursery Company, Winchester, Tenn.
- David Collins, Royal Palm Nurseries, Oneco, Florida.
- Rupert K. Courtoy, Royal Palm Nurseries, Oneco, Florida.
- Harold C. Cowell, 224th Aero Squadron, Kelly Field, San Antonio,

Texas. Swan River Nurseries, Patchogue, L. I., N. Y.
 Bethel Drymon, Royal Palm Nurseries, Oneco, Florida.
 Clinton Drymon, Royal Palm Nurseries, Oneco, Florida.
 R. E. Drymon, Royal Palm Nurseries, Oneco, Florida.
 William B. Drymon, Royal Palm Nurseries, Oneco, Florida.
 William Flemer, Jr., Private U. S. Expeditionary Force, Ambulance Corps, Battalion No. 23, Section No. 23, France. F. & F. Nurseries, Springfield, N. J.
 Clarence J. Galligan, 2nd Co., U. S. C. A., Fort Adams, R. I.—The Elm City Nursery Co.
 Dean Grauer, Royal Palm Nurseries, Oneco, Florida.
 Ralph Griswold, Royal Palm Nurseries, Oneco, Florida.
 Melvin Head, Royal Palm Nurseries, Oneco, Florida.
 Stout Hill, Royal Palm Nurseries, Oneco, Florida.
 John B. Hinson, Royal Palm Nurseries, Oneco, Florida.
 David L. Hires, Royal Palm Nurseries, Oneco, Florida.
 Edwin Hoyt, 1st Lieutenant of the Field Artillery, Officers' Reserve Corps, now stationed at Camp Grant, Rockford, Ill.—The Stephen Hoyt's Sons Co., Inc., New Canaan, Conn.
 Jackson & Perkins Co., of Newark, N. Y., have hung out a service flag with four stars in it. The stars represent:
 P. V. Fortmiller, Ordnance Department, Washington.
 Loren G. Olmstead, Sergeant, Camp Gordon, Ga.
 Clarence G. Perkins, Naval Radio School, Newport, R. I.
 Stuart Perkins, Chief Petty Officer, Naval Aeronautic Station, Miami, Fla.
 Thomas Jones, Royal Palm Nurseries, Oneco, Florida.
 Henry Edward Kelley, 1st Lieutenant, Company C, 165 Infantry, American Expeditionary Force, now in France.—The Stephen Hoyt's Sons Co., Inc., New Canaan, Conn.
 William P. Langdon, Third Officers' Training Camp, Yaphank, N. Y.—The Elm City Nursery Co.
 Lee Lesley, Royal Palm Nurseries, Oneco, Florida.
 Robert J. McCarthy, Sergeant, 101st Machine Gun Battalion, American Expeditionary Force now in France.—The Elm City Nursery Co.
 Albert F. Meehan, Third Officers' Training Camp, Yaphank, L. I., N. Y. Member of firm Thomas B. Meehan Co., Dresher, Pa.
 Wade Muldoon, Sergeant, Headquarters Military Police, Camp

Hancock, Ga.—Thomas Meehan & Sons.
 Roy W. Nixon, Royal Palm Nurseries, Oneco, Florida.
 Mack Overstreet, Royal Palm Nurseries, Oneco, Florida.
 Paul Rathert, Battery F., 128th U. S. F. A., Ft. Sill, Oklahoma, New Haven Nurseries, New Haven, Mo.
 Norman A. Reasoner, Signal Corps, Aviation Section, San Antonio, Texas. Royal Palm Nurseries, Oneco, Florida.
 Meredith P. Reed, Captain, Sixth Company Section U. S. Officers' Reserve Corps.—Vincennes Nurseries, Vincennes, Indiana.
 Philip Rouse and Julian Rouse, nephews of the Smith Brothers, now in the Naval Reserve, with headquarters at Jacksonville, Fla.
 Charles Schwentker, Battery F, 128th U. S. F. A., Ft. Sill, Oklahoma—New Haven Nurseries, New Haven, Mo.
 Charles R. Smith, Aviation Section of the Signal Reserve Corps, Aviation Camp, San Antonio, Texas.—Smith Bros. Nursery Company, Concord, Ga.
 Lawton V. Smith, nephew of the Smith Brothers, of Concord Nurseries, of Concord, Ga., now a lieutenant in the Aviation Section of the Army, and stationed near Toronto, Canada.
 Clay M. Stark, Stark Bros. Nurseries & Orchards Co., Louisiana, Missouri. American Field Service. Now in France.
 Lloyd C. Stark, Major of the Field Artillery, Fort Sill, Okla. Vice-President and a Director of Stark Bros. Nurseries and Orchards Co., Louisiana, Mo. President of the National Association of Nurserymen.
 Otto Sweat, Royal Palm Nurseries, Oneco, Florida.
 George Taylor, Battery "F," 108th U. S. F. A., Camp Hancock, Georgia.—Thomas Meehan & Sons.
 Ray R. Thompson, Royal Palm Nurseries, Oneco, Florida.
 Alfred E. Tull, Royal Palm Nurseries, Oneco, Florida.
 Edmond Wallays, Royal Palm Nurseries, Oneco, Florida.
 W. R. Wedge, Royal Palm Nurseries, Oneco, Florida.
 Stanley V. Wilcox, Co. E. 103rd Engineers, Camp Hancock, Augusta, Ga. Thomas Meehan & Sons, Germantown, Pa.
 Claud Wilson, Royal Palm Nurseries, Oneco, Florida.
 Luther C. Wilson, Royal Palm Nurseries, Oneco, Florida.
 John T. Wilson, Royal Palm Nurseries, Oneco, Florida.
 William Whitted, Royal Palm Nurseries, Oneco, Florida.

Notes from Arnold Arboretum

LILACS. The Lilac of old gardens with its purple or white fragrant flowers, hardy, long-lived, easily increased by shoots from the roots, resistant to all sorts of climate, known to every boy and girl brought up in the country, is in New England what "The May" (*Crataegus*) is in Old England, the best loved of all shrubs. It is loved but not respected. No one hesitates to break down a Lilac-bush for the flowers. Without the protection of special policemen the Arboretum Lilacs would be exterminated in a day. It is impossible to protect Lilac flowers in public parks and city squares, and every year city hawkers in search of them extend their depredations further into the suburbs; and in Lilac season automobiles loaded with stolen mutilated Lilac branches covered with wilted flowers are common objects along all the roads leading into Boston.

The first Lilac to get a place in European gardens was the plant which only slightly modified is still to be found growing in the neighborhood of many old New England farm-houses. This plant (*Syringa vulgaris*) reached western Europe in 1597 by the way of Constantinople and Vienna. It was long believed to have come originally from Persia and it is only in comparatively recent years that it has been known that this Lilac was a native of the mountain forests of Bulgaria. Plants raised at the Arboretum from seeds of the wild Bulgarian plants are growing with the other Lilacs in the collection, and it is

interesting to compare the flowers of the wild type with those which cultivators have produced in the last half century. Another Lilac, the so-called Persian Lilac (*Syringa persica*), a native of the region from the Caucasus to Afghanistan, was known in England as early as 1658. This is a smaller plant than the common Lilac, with slender stems, narrower leaves, and smaller but very fragrant flowers. The flowers are pale lilac color but there is a form with nearly white flowers, and one on which the leaves are deeply divided (var. *laciniata*). The Persian Lilac blooms usually ten days later than the common Lilac and is a beautiful garden plant, but is probably less often cultivated than it was a century ago. It is of particular interest, however, as one of the parents of the first hybrid Lilac, the other being *Syringa vulgaris*. This hybrid appeared in the Botanic Garden at Rouen, France, early in the nineteenth century and through a mistaken idea of its origin was named *Syringa chinensis*. It is sometimes called *Syringa rothomagensis*. This hybrid is one of the most valuable of all Lilacs. It grows quickly to a large size; it is very hardy and blooms freely every year. In shape the leaves resemble those of the Persian Lilac but are broader; the flowers, too, recall those of the Persian Lilac, but they are larger and are produced in long massive clusters sometimes nearly two feet in length, and so heavy that the slender branches do not well support them. The flowers are reddish purple but there are

forms with darker red flowers and with nearly white flowers.

In an issue of *The Garden Magazine*, Mr. Theodore A. Havemeyer describes the development of the modern Lilacs, which, according to him, date from 1843, no mention in his paper being made of *Syringa chinensis*. In 1843 a nurseryman at Liege, in Belgium, produced a Lilac with small double flowers. Nothing is said of its parentage, but as it was called *Syringa vulgaris flore plena Liberti*, and later *Syringa vulgaris azurea plena*, it was probably a seedling of the common Lilac and not a hybrid. This plant is not in the Arboretum collection, and if it is known to any reader of this Bulletin the Arboretum will be glad to hear from him, for although it probably has little to recommend it, as an ornamental plant this Lilac has historical interest and for that reason should find a place in the Arboretum collection. It was this plant that Lemoine, the French hybridizer, selected as the seed-bearing parent in his first attempt to improve the garden Lilacs, fertilizing the flowers with pollen of the handsomest varieties of the common Lilac of that day and of a Chinese species, *Syringa oblata*, which had been found by Fortune in a Shanghai garden and sent by him to England nearly sixty years ago. This Chinese Lilac is distinguished from all other Lilacs by the broad, thick, lustrous leaves which turn deep wine color in the autumn. The flowers are light lilac color, exceptionally fragrant, and are borne in short, compact clusters. The fruit is not known. This is one of the earliest Lilacs to bloom here, but unfortunately the flower-buds are often injured or destroyed by late frosts. For this reason, although the flowers are not surpassed in color and fragrance by those of many Lilacs, this plant cannot be recommended for general cultivation in this part of the country.

The crossing of *Syringa oblata* and *S. vulgaris azurea plena* produced a plant which has been called *Syringa hyacinthiflora*. This is a vigorous shapely shrub with leaves the shape of those of its Chinese parent, which turns reddish in autumn but without the brilliant colors of the Chinese plant. The flowers are small and double, in small clusters, bluish lilac and as fragrant as those of *S. oblata*. This plant is interesting as the second of the four species-hybrids of Lilacs which are now known, and valuable for its very early fragrant flowers. It has probably played, too, an important part in the improvement of the double-flowered forms of the common Lilac which have been produced in recent years by Lemoine and other European nurserymen. *Syringa hyacinthiflora* is not often found in American gardens, but it is well established in the Arboretum collection.

By fertilizing the flowers of *Syringa vulgaris azurea plena* with the varieties of the common Lilac, Lemoine produced the first important double-flowered Lilacs, *S. Lemoinei* and others, and by again crossing these with improved forms of the common Lilac the double-flowered Lilacs of recent years have been made. By the crossing of varieties and by careful selection the flowers of the common Lilac have been gradually changed in size and in color in the last thirty years, but unfortunately the flowers of some modern Lilacs have lost a good deal of the fragrance of the old-fashioned Lilac, which, once enjoyed, is never forgotten. There are too many varieties of the common Lilac now cultivated. Some of them with

different names given to seedlings in different nurseries and often in different countries are identical, and others are so much alike that they can only be distinguished by close comparison. There are more than two hundred of these named varieties of *Syringa vulgaris* now in cultivation. It is important to cultivate them all in the Arboretum for study and comparison, but in a private garden everything that is best in the forms of *Syringa vulgaris* can be found in not over a dozen of the single-flowered and a dozen of the double-flowered forms. The Arboretum does not undertake to name the twenty-four best varieties. The selection must be left to the person who is going to plant them, for no two persons agree about Lilac flowers. There are between one hundred and sixty and one hundred and seventy named varieties of this Lilac in the Arboretum collection:

In planting Lilacs it must be remembered that plants on their own roots are superior to those which have been grafted on other varieties of the common Lilac, for Lilacs produce many root-suckers. These often grow vigorously, so that a person who buys a fine named variety may in a few years find that the suckers from the root on which it was grafted have overpowered and killed his named variety, or that he has a bush producing on different branches flowers of his original purchase and of the stock. Nurserymen also use the Privet as a stock on which to graft Lilacs. But Lilacs should never be grafted. Although they can be propagated in winter by cuttings of hard wood, the best way is to make soft wood cuttings in late June or early July. American nurserymen rarely adopt this method for it takes a little longer to produce saleable plants than it does by grafting, but the plants on their own roots are so much more valuable than grafted plants that no one should ever buy a grafted Lilac.

SYRINGA PINNATIFOLIA is one of the Lilacs discovered by Wilson in western China which flowered two years ago for first time in the Arboretum. The small nearly white flowers in small clusters are less beautiful than those of almost any other Lilac, but the plant is of considerable interest, as it is the only Lilac with pinnate leaves. It is with the other Chinese Lilacs on the path at the top of the bank on the left-hand side of the Bussey Hill Road occupied by the Lilac Collection.

REALIZING THE SITUATION

If there was need last year for greatly increased production in the commercial orchards, as well as the backyard and vacant lot gardens of the Dominion, that need is vastly greater this year. Few in Canada realize how acute that need is. It seems as though it is not until we see people in actual want or we are faced with the impossibility of satisfying our own needs that it becomes possible for most of us to actually realize the seriousness of a situation concerning which we may have been warned for months.

In portions of Europe and Asia thousands of people, including little children, have already died of starvation. The area affected by the food shortage has increased, and continues to increase rapidly. Lord Rhondda, the British Food Controller, said recently:

"The food wanted by mankind does not exist. The word 'shortage' is not strong enough for the situation. To

put the matter bluntly, the world is up against a nasty thing, familiar to the people of India, called 'famine.' "

While, so far, the effect of these conditions has fallen mainly on more remote districts of Europe and Asia, their effect is already becoming apparent in countries with which we are more familiar, such as Holland, Sweden, and even Great Britain, where meat, butter and milk are already difficult to purchase, while oils and fats are practically unobtainable. The people of this continent will be the next to feel the pinch, and should crops prove poor this year the pinch will be a hard one.

In view of these conditions it is not to be wondered at that urgent appeals are being issued to the people of Canada to grow all the vegetables and fruit this year they can possibly produce. This brings a great responsibility home to the people of our towns and villages who have gardens or land capable of being used for that purpose. In the country the farmers and fruit growers are short of help and are working to the limit of their strength. In our towns and cities there are thousands of people who after office hours can raise enough vegetables and fruit, not only for their own use but for that of many other families as well. Let everyone of us who can do so resolve to do our part to meet the situation, so that later we will not feel that people are forced to go hungry in part, at least, because of our failure to meet the need about which we have been so plainly warned.—*Canadian Horticulturist*.

March 16, 1918.

The National Nurseryman,
Hatboro, Pa.

Dear Sirs:—

I herewith send check for \$1.50 to renew my subscription to your most valuable paper. Am sorry that I failed to send it before as I notice that my subscription expired with the December issue.

Kindly send the back copies at once, and oblige,

Very truly yours,

JOHN M. WISE,
The Wise Avenue Nurseries, Freeport, Ill.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC.

Required by the ACT OF CONGRESS OF AUGUST 24th, 1912

Of the NATIONAL NURSERYMAN, published monthly at Hatboro, Pa., for May 1, 1918.

State of Pennsylvania,
County of Philadelphia.

Before me, a Notary Public, in and for the State and the county aforesaid, personally appeared Thomas B. Meehan, who, having been duly sworn according to law, deposes and says that he is the Business Manager of the NATIONAL NURSERYMAN, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation) etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24th, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse side of this form: to wit:

1. That the names and addresses of the publisher, editor, managing editor and business managers are:

Publisher—THE NATIONAL NURSERYMAN PUBLISHING CO., INC., Hatboro, Pa.

Editor,—ERNEST HEMMING, Flourtown, Pa.

Managing Editor,—ERNEST HEMMING, Flourtown, Pa.

Business Manager,—THOMAS B. MEEHAN, Dresher, Pa.

2. That the owners are:

Mrs. Ellen B. Yates, Rochester, New York.

James McHutchison, New York City, N. Y.

Thomas B. Meehan, Dresher, Penna.

Albert F. Meehan, Dresher, Penna.

Penrose Robinson, Hatboro, Penna.

3. That the known bondholders, mortgagees and other security holders owning or holding 1 per cent. or more of total amount of bonds, mortgages, or other securities are: NONE.

THOMAS B. MEEHAN, Business Manager.

Sworn to and subscribed before me this 10th day of April, 1918.

Elmer Miller, Notary Public.

(My commission expires March 11, 1921.)

WANTED

We need a good salesman, with practical knowledge of Nursery stock, well experienced in traveling and selling. He must have initiative, a fair education, and in fact be competent to fill a good permanent position. In replying, give details of past experience.

BOBBINK & ATKINS,
RUTHERFORD, - - - N. J.

WANTED—Experienced nursery propagator. Ornamentals, Evergreens and Herbaceous stock. Good wages and steady position. State experience and references.

WOOD STUBBS & CO.,
LOUISVILLE, - - - KY.

WE WANT TO BUY RAFFIA

in any quantity. Spot cash paid.

Mail sample and price stating quantity to

McHUTCHISON & CO.
95 Chambers Street, New York

WANTED

25,000 to 50,000 and up Norway Spruce and White Spruce, from 1½ to 3 and 3 to 4 feet high. Must buy these at a bargain. If you have a surplus, here is a chance to clean up. In quoting state quantity, size and price.

The D. Hill Nursery Co.
DUNDEE - - - ILLINOIS
Box 401

FOR RENT—Sixty acres of land with house and four new greenhouses one hundred feet long heated with hot water, at station on P. R. R. in New Jersey. A few acres planted with trees, shrubs and hardy plants which will be sold at a very low price to a satisfactory tenant with terms to suit. The leaser will also contract with tenant to grow certain stock. Very low rental. An opportunity for an energetic young man with a little capital.

Address room 506 Magee Building, Pittsburgh, Pa.

Uncle Sam's Battle-Line for Food Stretches from Coast to Coast

Now, THIS year, not a year or two hence—is the time for nurserymen to unite in telling U.S. the value of fruits and how easily they can be grown. The man with a home and a hoe must get back of the man with the gun. Every foot of American soil MUST be made to produce more than ever before

There are 'steen Thousand Back Yards

in this land of Uncle Sam's without a single fruit tree where there ought to be at least two. There are side yards and front yards where a fruit tree will be as ornamental as a pine or plane, and **more profitable.**

There are more than 6,000,000 farms in Sammie's land, and **every one of these is a potential market** for the fruit trees grown by the members of the American Nurserymen

There are 'steen Million Fruit Trees

that will go up in brush-pile smoke this spring because a united effort to develop a market for these trees has never been put forth. Coöperative effort will show our people the necessity of raising more fruit; will tell them how to care for their trees and emphasize the profits they can get from their orchards. Coöperative effort will reduce the nurserymen's enormous waste and increase their gross profits.

Let Nurserymen Stop Advertising "Fruit Trees for the Cost of Digging"

Let them be business men, asking a reasonable profit from their honorable calling. To the last live man, let them subscribe immediately and liberally to the Market Development Fund, to the end that **business may be improved and profits increased.** Mail subscriptions today (on the basis of a definite sum per year for five years) to the editor of this paper, or to E. S. Welch, Treasurer, Shenandoah, Iowa, or to any member of

The Temporary Committee to Solicit Subscriptions for the Market Development Fund

F. L. ATKINS, President, Rutherford, New Jersey

E. S. WELCH, Treasurer

JOHN WATSON, Secretary, Princeton, N. J.

J. EDWARD MOON, Morrisville, Pa.

ROBERT PYLE, West Grove, Pa.

HENRY B. CHASE, Chase, Ala.

PAUL C. STARK, Louisiana, Missouri

AMERICAN FLORIST'S TRADE DIRECTORY
Price \$3.00, Postpaid
 For Sale By
NATIONAL NURSEYMAN PUB. CO. Inc.,
 HATBORO, - - - PA.

HORTICULTURE

A Magazine of Trade News and Cultural Information
 for the NURSEYMAN, FLORIST, SEEDSMAN and
 GARDENER. A reliable exponent of advanced Trade
 and Progressive Horticulture.

Published Weekly

SUBSCRIPTION \$1.00 PER YEAR

HORTICULTURE PUBLISHING CO.
 147 Summer St. Boston, Mass.

North Carolina Natural Peach Pits

Indications at this time are for a very light crop of 1918
 peach seed; and we suggest that you get in your order for
 whatever you may need of the 1917 crop, promptly. All prices
 are hereby withdrawn and we will quote by letter in response
 to inquiries, as we cannot determine at this time what the
 price shall be.

We suggest to our patrons that they place an order for
 their requirements and let the price take care of itself later.
 We have only one price to all. Inquiries gladly answered.

J. VanLINDLEY NURSERY CO.
 Pomona, N. C.

Subscribers to "Nurserymen's Fund for Market Development."

BAMBOO CANE STAKES

Natural color, 6 ft. 2000 per bale.

" " 8-9 " 600 " "

Dyed green, 3½ " 2500 " "

Write for prices and particulars.

McHUTCHISON & CO., 95 Chambers St., New York

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COLLECTED CLUMPS 1 FT. TO 3 FT., BUSHY

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FAIRFAX FARMS CO. INC.

R. F. D. No. 3

Fairfax, Va.

Under the present conditions we find the mail is
 often delayed and we ask our patrons to please send
 advertising matter promptly to our office at Hatboro,
 Pa.

The

Established 1841

Gardeners' Chronicle

is the Leading Horticultural Journal in the World

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YEARLY POST FREE

Specimen Copy and Catalogue of Horticultural Books post free
 on application to the publisher----

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EVERY SATURDAY

Advertising Space, \$1.25 per Inch. Subscription, \$1.50 per Annum

Under this title we publish the most reliable, progressive
 and up-to-date trade paper in the country, with departments
 covering the Nursery, Florist, Seed Trade and Allied Indus-
 tries. With a paid up subscription and distribution list of
 10,000 copies, nearly every copy of which is to men in business
 for themselves the worth of our columns will be readily ap-
 preciated. The editor of our Nursery Department is and has
 been for years, JOSEPH MEEHAN, of Philadelphia.

For sample copy, discounts, etc., address
 The Florists' Exchange, P. O. Box 100, Times Square Sta.

Charles Detriche, Senior
 ANGERS, FRANCE

Grower and Exporter of Fruit-Tree Stocks,
 Forest Tree Seedlings, Rose Stocks, Shrubs,
 Vines, and Conifers for Nursery Planting.

For all information as to Stocks, prices, terms, etc., address

Jackson & Perkins Co.

(SOLE AGENTS)

NEWARK, N. Y.

ESTABLISHED 1893

THE NATIONAL NURSEYMAN

INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock.

Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence
 pertaining to the Editorial Department, should be addressed.

Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all leading
 nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock
 offered for sale.

SUBSCRIPTION PRICE \$1.50 per year in advance.

FOREIGN SUBSCRIPTIONS \$2.00 per year in advance.

Advertising Rates on Application

THE NATIONAL NURSEYMAN PUBLISHING COMPANY Incorporated

Subscribers to "Nurserymen's Fund for Market Development."

Hatboro, Penna.

When writing to Advertisers please mention the National Nurseryman.

Bobbink & Atkins

Nurserymen and Florists

RUTHERFORD, NEW JERSEY
Palms and General Decorative Plants, **INSPECT**
Conifers, Shade and Ornamental Trees **INVITED**

ASK FOR WHOLESALE CATALOGUE
Subscribers to "Nurserymen's Fund for Market Development."

THE HORTICULTURAL CATALOG

A Monthly Trade Publication for
Western Nurserymen, Florists, Seedsmen, Etc.
Contents alphabetical listings of available surplus stock, etc.
Sample Copy 15c \$1.00 per year. Foreign \$1.50
THE HORTICULTURAL CATALOG, Los Angeles, California

A Large Stock of
**Apple, Pear, Cherry and Peach
Grape Vines, Blackberry and
Raspberry Plants**

And a general line of **ORNAMENTAL TREES**
and **SHRUBS**. All stock clean and thrifty, the
best that can be grown.

T. B. WEST, Perry, Ohio.

Fruit Trees, Roses, Manetti Stocks

in heavy quantities

JOHN WATSON, Nurseryman,
Newark, New York
Is our sole agent for United States and Canada

S. SPOONER & SONS,
The Nurseries - - Hounslow,
Est. 1820 England

W. T. HOOD & CO. OLD DOMINION NURSERIES

RICHMOND - - - VIRGINIA

We offer for Fall 1917 and Spring 1918, general line of
Nursery Stock—California and Amoor River Privet, Norway
Maples, Oriental Planes, Evergreens, etc.

We will have a heavy stock of Peach Trees and Norway
Spruces on which we can quote attractive prices.

We expect to be in position to offer Natural Peach Seed,
crop of 1917. Send us your list for quotations.

SCARFF'S NURSERY

Headquarters for
Small Fruit Plants
1200 Acres "At it 25 Years"

Strawberries	Currants	Rhubarb
Raspberries	Gooseberries	Asparagus
Blackberries	Grape Vines	Horseradish
Dewberries	Privet	Hardwood Cuttings
Berberry	Spirea	Butterfly Bush

100,000 transplanted Raspberry, Blackberry and Dewberry plants
for retail trade. See wholesale list before placing your order.

W. N. SCARFF & SONS
NEW CARLISLE - OHIO

W. FROMOW & SONS

Azalea mollis, Rustica and Ghent in all the leading varieties,
grown from layers not grafted.

Manetti Stocks clean and well rooted for grafting or open
ground.

Standard, Climbing, Weeping and Dwarf Roses in great variety
Rhododendrons, the cream of the **Hardy American varieties**.

Andromeda floribunda, japonica, and speciosa, bushy budded
plants.

Kalmia latifolia.

Green and River's Purple Beech in all sizes up to 12 feet.

Prices and full particulars on application.

WINDLESHAM NURSERIES
Surrey, - - - England.

Portland Wholesale Nursery Co.

122½ Grand Avenue, Portland, Oregon

General Nursery Stock and Nursery Supplies

APPLE, one year, large assortment.
PEAR, one and two year, mostly Bartlett.
CHERRY, one and two year, general assortment.
PRUNE, one year, mostly Italian and French.
GOOSEBERRY, one and two year, Oregon Champion.
SHADE TREES in assortment.
ROSES, field grown, large assortment.

Our Trade List is now ready; a postal card will bring it.

ALL "AMERICAN NURSERYMEN"

Wishing to do business with Europe should send for the

"Horticultural Advertiser"

This is The British Trade Paper being read weekly by
all Horticultural traders. It is also taken by over 1000 of
the best Continental houses. Annual subscriptions to cover
cost of postage, \$1.00. Money orders payable at Lowd-
ham, Notts. As the H. A. is a purely trade medium appli-
cants should, with the subscription, send a copy of their
catalogue or other evidence that they belong to the nursery
or seed trades. Address

Editors of the "H. A." LOWDHAM, NOTTS,
ENGLAND

TREES

Largest assortment in New Eng-
land. Evergreens, deciduous trees,
both common and rarer varieties.
Sturdy, choice stock that can be
depended upon. Send for catalog
and special trade prices.

The Bay State Nurseries

North Abington
Mass.

SHRUBS

This New England soil and cli-
mate produce fine sturdy shrubs.
Special trade prices. By the thous-
ands, hardy Native and Hybrid Rho-
dodendrons—transplanted and accli-
mated. Send your lists let us est.

When writing to Advertisers please mention the National Nurseryman.



Nurserymen Who Are Prepared Secure Profitable Contracts

Frequently you might secure contracts for park, cemetery or country estate developments if you could execute the entire work. Our organization will co-operate with you, supplying all factors for securing such contracts, and making much larger sales of your own nursery stock. The service we offer includes

Grading and Road Construction

Pools—Walks—Gardens

Large Tree Moving and Planting

Contracts for spring work should be arranged for at once. We will go anywhere east of the Mississippi River. A wire or letter will place us in touch with you immediately. Write us for details of our methods and policy, and list of references.

"Constructors of Landscapes"

HYLAND-JENCKS

Landscape Engineers and Contractors
507 Fifth Ave., New York



NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER—We offer all or any part of an accumulation of long Nursery Bands one inch in width and sixty inches to one hundred and twenty inches in length, at a reduction of twenty dollars a ton. This offer holds good until stock is disposed of.

WRITE US

COVERING YOUR WANTS IN STEEL BANDS

American Steel Band Co.,

888 Progress Street,

ALLEGHENY, PA.

THE CHASE LABELS

For Nurserymen and Florists are Excelled by None

Plain, Painted, Wired with Tinned or Copper Wire and

PRINTED IN ANY MANNER that may be called for

Prices as low as First-Class Work and Unequalled Promptness in Delivery will justify.

THE BENJAMIN CHASE CO.

P. O. Address, DERRY VILLAGE, N. H.

Western Union Telegraph, DERRY, N. H.

Subscribers to "Nurserymen's Fund for Market Development."

"BUDTIE"

What is it?

There will be no Raffia for sale this year. Government requisitioned all of it for war purposes.

What will you do for budding this year?

USE "BUDTIE" OF COURSE

Write us for samples and prices at once.

THOMAS B. MEEHAN CO.

Introducers of "Budtie"

DRESHER,

PENNA.

Subscribers to "Nurserymen's Fund for Market Development."

Strawberry Plants

of selected money making and garden variety. Clean roots and clean foliage plants of the highest fruiting quality.

Get in touch with us for Special arrangements to supply your wants. Will ship to you or direct to your customers. First class service in every respect and plants that will please your trade.

Telegraph both

Western Union &

Postal

V. R. Allen

59 Lane Ave.

SEAFORD - DELAWARE

Seeds For Nurserymen

Apple, French, Japan and Kieffer Pear, Myrobolan Plum and Quince Seeds. Also Tree, Shrub and Evergreen Seeds in a large assortment. My Catalogue contains complete list with Prices. Send for a copy.

THOMAS J. LANE
SEEDSMAN

DRESHER,

Penna., U. S. A.

-- FRUIT STOCKS --

ROSES in the best and latest sorts, and other General NURSERY STOCKS imported to order from France, England and Ireland for fall delivery; we attend to import licenses if ordered timely.

AUGUST ROLKER & SONS

51 Barclay Street,

NEW YORK CITY.



ONE OF THE FAMOUS HARRISON PEACH ORCHARDS

If food is to win the war, then cultivate your orchard and produce good fruit. Our fruit trees are budded from bearing commercial orchards.

HARRISONS' NURSERIES, - BERLIN, MARYLAND

Subscribers to "Nurserymen's Fund for Market Development."



THE NATIONAL NURSERYMAN



JUNE 1918

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of

*Peach, Gooseberries,
Currants, Berberis,
Spirea Van Houtte,
Other Ornamental Shrubs,
H. P. Roses, Etc.*

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.

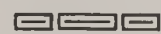
Monroe, Mich.

Subscribers to "Nurserymen's Fund for Market Development."

MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

Shenandoah, Iowa



Our Specialty

A large and complete line of high quality Nursery Stock for the wholesale trade.

We still have a good assortment of FRUIT TREES, SMALL FRUITS, SHADE and ORNAMENTAL TREES, SHRUBS, ROSES and VINES.

With our superior storage facilities we are able to furnish a good assortment of stock for shipment until the middle of May.

ASK FOR TRADE LIST AND BULLETINS.

We are subscribers to the NURSERYMEN'S FUND FOR MARKET DEVELOPMENT, a co-operative national campaign to create new business. Ask about it.

Progressive, Superb

and Peerless

...Everbearing...

Strawberry Plants

We can supply you fresh dug every day. Healthy true-to-name, well rooted at attractive prices.

Address

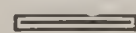
The W. F. Allen Company

Salisbury, Maryland

"To the Trade"

*"I hope to meet you
at Chicago"*

C. R. Burr



C. R. BURR & CO.

Manchester, Conn.

Subscribers to "Nurserymen's Fund for Market Development."

The
Preferred
Stock

The
Preferred
Stock

TO THE TRADE

We thank you for the patronage that you have given us this season. It has been probably the busiest and best selling season that we have ever had. We haven't made any money, because of the ever increasing cost of production, but if we are able to break even, besides subscribing to the various war funds and buying some liberty bonds, so as to keep the boys in the trenches until victory is won, we shall be satisfied. We doubt if any nurserymen will make any very long profits this season.

Prices generally will have to increase next season very materially, not only in order to enable nurserymen to keep abreast with the times, but also to stay in business, and in order to bring about an increase in prices, there will have to be co-operation between the wholesaler and retailer.

Every nurseryman should try to be present at the Nurserymen's Convention, in Chicago. New problems will be presented there which need the attention of every man in the Trade. If you are not a member, join now.

Back up the Market Development Fund. It will mean dollars to you, and no nurseryman can afford to stay out of it.

Too much praise cannot be given our Secretary for his efficient work in getting nursery stock placed in the "Preferred" class of freight. Keep him on the job.

We expect to have our usual good supply of J. & P. specialties, such as Roses, Clematis, Tree Hydrangeas and also a full line of Perennials, Shrubs, Shade and Fruit trees.

Jackson & Perkins Company
NEWARK - - - NEW YORK

Subscribers to "Nurserymen's Fund for Market Development."

The
Preferred
Stock

The
Preferred
Stock

To Illustrate:-

"We received the car you shipped us this morning. Our only regret is that we did not order more from you."

—Rye Nurseries,
Rye, New York,
April 24, 1918.

That is quoted to illustrate a point: The order was sold in sharp competition,—not of price but of quality, for their trade is critical, local and permanent. Mr. Fremd knew what he wanted; he came to see our stock,—explained his needs,—gave us his order. For his high-class trade he could not afford to auction off his order; he bought with personal knowledge of the relation of price to value. He saw the stock.

Most of our sales have been made to nurserymen who have visited our plant and have seen our stock. And we take pride in the fact that every order filled has brought us other orders.

We want to acquaint you with the quality of our goods and service; we assume, of course, that you realize there are different values in the same article; we all realize that but we have been slow to admit it.

Acquaintance with this new wholesale business can advantage you as well as us.

Princeton Nurseries

at Princeton, in New Jersey

Growers for Nurserymen Only.

June first.

FRAMINGHAM QUALITY NURSERY STOCK

for

YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Now is the time to prepare for Fall business. Make us a visit during your vacation, inspect our stock and reserve what you require for Fall shipment.

Framingham Nurseries
FRAMINGHAM
MASS.

Hill's Evergreens

You can work up a good profitable trade in Evergreens if you have the right kind of stock. Our main specialty for over half a century has been the propagation of young Evergreen stock for the wholesale trade in immense quantities at low prices.

We have all the leading varieties in small sizes, for all purposes, suitable for lining out to grow on for your trade.

Nurserymen who have heretofore depended on Europe for their young Evergreen plants can now be assured of a good reliable source of supply right here in America, and we solicit the opportunity of quoting on your requirements.

"Made in U. S. A." and "American Stock for American Planters" should, from now on, more than ever, be the slogan of American Nurserymen for it means "money saved in the long run" to start with nice, strong, sturdy, vigorous American-grown stock which has been produced right here in America.



YOU want to keep posted on Evergreens;

WE want to become better acquainted with you;

Let's get together.

The D. HILL Nursery Co., Inc.

Evergreen Specialists

LARGEST GROWERS IN AMERICA

Box 401

Dundee, Ill.



McFARLAND SERVICE

goes farther than saying that so many pages of copy will require a catalogue of a certain size; it means more, than putting the copy into type, making up the pages, and printing the required number of sheets of paper.

McFARLAND SERVICE

means a discussion by the "war board" of the form to be adopted for the new edition; of the design for the cover; of the character and style of the illustration used in the text pages.

In most cases the copy itself is discussed, and viewed from the point of the outsider rather than from that of the nurseryman or seedsman.

Frequently the "war board" disagrees on some point and then—well, the dictaphone and the stenographer fail to get all the remarks!

But out of these conferences come the plans for the "McFarland" catalogue which is at once the profit of the customer and the envy of his competitor.

We have said so many times "McFarland Catalogues make good" that to us the phrase is trite. Yet time after time the statement has proved to be true. If you are one of our customers you *know*; if you are not in our family we would like to show you *how* McFarland Catalogues make good.

J. HORACE McFARLAND COMPANY
HARRISBURG, PENNSYLVANIA

We shall be represented at the Convention by MR. McFARLAND, MR. BECKLEY and MR. ROWE
(1) (4) (5)

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispore, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

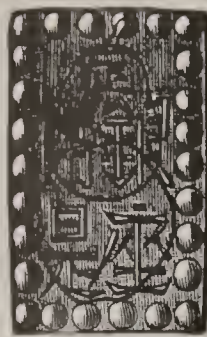
Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental Stock

Sherman Nursery Co.

Charles City, Iowa

Subscribers to "Nurserymen's Fund for Market Development."

Heikes—Huntsville—Trees



Established 1872

1500 Acres

FRUIT TREES ROSES and other ORNAMENTALS

For the wholesale trade.
All of our own growing.

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

For Fall of 1918

Ornamentals, Shade Trees, Evergreens,
Perennials, Fruits, etc.

A large stock of the following:

Cherry Trees, 2 yr.
Apple Trees, 2 and 3 yr.
Peach Trees, 1 yr.
Norway Maple up to 2 inch.
Am. Elm, all sizes.

Write for special prices on car lots.

C. M. Hobbs & Sons
Bridgeport, - Indiana

Subscribers to "Nurserymen's Fund for Market Development."

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of Own Root Roses

ORNAMENTAL TREES SHRUBS
BERRIES CLEMATIS
EVERGREENS PEONIES PHLOX
and
HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY
GENEVA, N. Y.

70 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE

THE

North-Eastern Forestry Co.

CHESHIRE

...Connecticut...

A Pruning Book That Will Build Business for You



Here is a book that will help you by helping your customers.

It is a practical guide to right pruning and growing. It will tell every purchaser of your products how, when and where to prune for the most vigorous and healthy growth.

Knowing the kind of shears to get is equally as important as knowing how to use them. This book will give your customers some helpful information about shears too.

We'll Send You a Copy Free

We have a plan of co-operative selling and advertising of which "The Little Pruning Book" is an important part. It's a plan that will help you sell Nursery Stock and help us sell Pexto Pruning Shears.

You must see the book before you can appreciate the plan. It sells in book-stores for 50 cts., and believe us "It's worth sending for." Furthermore, sending for it does not obligate you in the slightest. It just gives us an opportunity to tell you about our business building plan.

Send for your free copy today.

The Peck, Stow & Wilcox Co.

2189 W. Third Street

Cleveland, Ohio



PRUNING SHEARS

We are now ready to quote lowest prices on
FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries
Sparta, Ky.

For FUMIGATION With
HYDROCYANIC ACID GAS

"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by

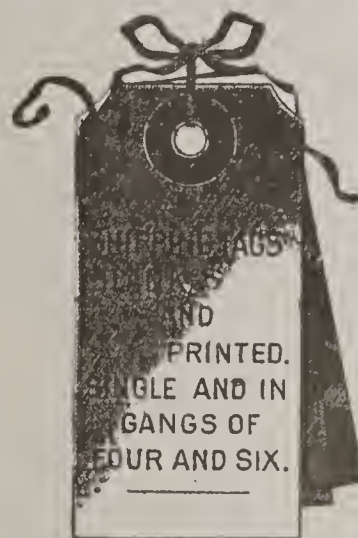
The Roessler & Hasslacher Chemical Co.
100 William St. - - New York, N. Y.

HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

Rawhide Brand of Shipping Tags and Tree Labels

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.
West Chester, Pennsylvania

For Spring 1918 We offer a Complete List of **Shade Trees, Shrubs, Evergreens**
 WILL BE PLEASED TO SUBMIT PRICES **AUDUBON Nursery, P.O. Box 731, Wilmington, N. C.**

P. OUWERKERK,

No. 216 Jane St., Weehawken Heights, Hoboken, N. J.
 Rhododendrons, Clematis, H. P. Roses, Hardy Azaleas,
 Paeonies, Magnolias, Box Trees, Fancy Conifers, Hydran-
 geas and Shrubs, our specialties at our **HOLLAND NUR-**
SERIES. Some of the goods on hand here during the
 packing season.

TREE SEED

Large assortment of Tree, Shrub and Fruit
 Seeds for ornamental and forestry purposes.
 Send for catalogue. **CONYERS B. FLEU, Jr.**
 Germantown, Philadelphia, Pa.



EVERY SATURDAY

Advertising Space, \$1.25 per Inch. Subscription, \$1.50 per Annum
 Under this title we publish the most reliable, progressive
 and up-to-date trade paper in the country, with departments
 covering the **Nursery, Florist, Seed Trade and Allied Indus-**
tries. With a paid up subscription and distribution list of
 10,000 copies, nearly every copy of which is to men in business
 for themselves the worth of our columns will be readily ap-
 preciated. The editor of our Nursery Department is and has
 been for years, **JOSEPH MEEHAN**, of Philadelphia.
 For sample copy, discounts, etc., address
The Florists' Exchange, P. O. Box 100, Times Square Sta.

WE OFFER

Grape Vines, Currants and Gooseberries
 in all varieties and grades, also
 Grape and Currant Cuttings and Light Grade of Vines for
 Lining Out in Nursery Rows
WRITE FOR PRICES

F. E. Schifferli, - Fredonia, N. Y.



Unusual and rare stock in great varie-
 ty; hardy Bamboos, Palms, Crapemyr-
 tles, fruit and Economic trees and
 plants, etc., etc., from all over the world.
 New additions constantly being tested.
 Ask for complete descriptive catalog, and
 wholesale rates. **34th year.**

REASONER BROS.,
ONCO - FLORIDA.

PRINTING

Catalogues
 Stationery
 Business Forms



The Robinson
 Publishing Co.
 Hatboro, Pa.

Specialists in Nursery Printing
 Ask for Prices. We are the printers of this Magazine



Field-grown own-root
Roses Shipments Jan. 1st
 to March 15th
Howard Rose Co., Hemet, Cal.

Spring price-list to the trade only.
 2 1/4 and 4-inch pot-grown in 400 best sorts.
 2-year-old field-grown in Hardy Climbers.

ROSES **THE LEEDLE FLORAL COMPANY.**
SPRINGFIELD-OHIO.

THE WESTMINSTER NURSERY

J. E. Stoner, Prop.

WESTMINSTER

MARYLAND

Offers for Fall, 1918:

10,000 Monacacy Apple, 2 yr., Buds.
 250,000 Cal. Privets, 2 yr. and 3 yr.
 500,000 Asparagus Asst., 2 and 3 yr.
 Barberry Thun., 3 yr., extra fine.
 Lombardy Poplars, 8 to 16 feet.
 Oriental Planes, 8 to 16 feet.
 Tulip Poplars, 6 to 12 feet.
 Horse Chestnuts, 8 to 12 feet.
 Catalpa Speciosa, 8 to 12 feet.
 Can supply the above in CAR lots.

We also offer in large lots. Rhubarb, Cumb. Raspberry,
 Ruby, Miller, and St. Riggs Raspberry Altheas, 3 to 5 feet,
 Deutzias, and Spireas Asst., Hydrangeas P. G. Etc. Will
 make low prices for early orders.

FAIRFIELD NURSERIES

FRUIT AND SEED FARMS

OFFER for Spring 1918

GRAPE VINES—One and two years old. Varieties
 largely Moore's Early, Concord and Niagara.

Also Scarlet or Crimson Clover Seed and Cow Peas.
 Free from weed seeds, all re-cleaned and guaranteed first
 class.

Correspondence solicited. Price list upon request.

CHAS. M. PETERS

P. O. Address, Salisbury, Wicomico County, Md., R. F. D. 3

Long Distance Phone and Telegraph, Salisbury, Md.

EVERBEARING STRAWBERRY PLANTS

If you need Everbearing strawberry plants to fill spring
 orders or if you wish to increase your planting in nurseries,
 we can supply you with genuine **PROGRESSIVE** Everbearing
 plants, guaranteed to be **TRUE TO NAME** and handled so as
 to reach you in best of growing condition. Write for prices.

We have been growing and breeding the Everbearing straw-
 berries for the past eight years and have many new varieties
 growing in our experimental grounds that are not yet for sale.
 We invite a personal visit to our grounds during fruiting sea-
 son, preferably during August or September. The latch string
 is always out.

THE GARDNER NURSERY CO., Drawer 103, Osage, Iowa.

ELMER BROS. NURSERY

Grows all kinds of **ROSES** on contract for future delivery. Our are all budded on the Manetti Stock. Prices on grown on contract are very reasonable, as we are growing them in large quantities. Santa Clara Valley land and climatic conditions are ideal for Rose growing.

Delivery can be made from October to March 1.

The Roses are thoroughly hardened and matured by October 1, for safe shipment.

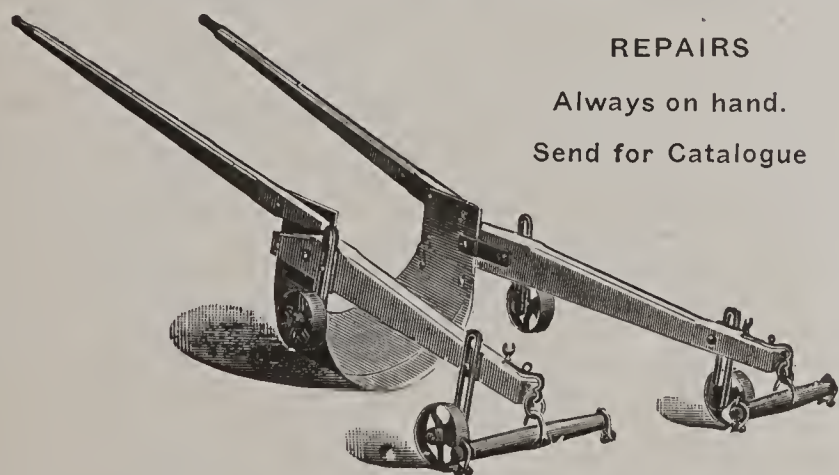
Write to us at once, as we are preparing our budding lists for the summer budding.

ELMER BROS. NURSERY
SAN JOSE. 74 South Market Street, CALIFORNIA

1857

1918

BRAGG'S COMMON SENSE TREE DIGGER



REPAIRS
Always on hand.
Send for Catalogue

Digger gets All the Roots at the rate of Twenty to Forty Thousand trees per day, and only needs same power as plow.

L. G. BRAGG & CO.
KALAMAZOO, MICH.

You can save Time and Money

If you use our neatly packed

SHEET NURSERY BURLAP

Put up in bales

In various size sheets ranging in sizes from 24x24 to 40x40 in.

Write for particulars

Sarachan & Rosenthal
64-66 Hanover Street
Rochester, - - New York

Vincennes Nurseries, W. C. REED, Prop.
VINCENNES, - - INDIANA

We are pleased to offer for Fall or Spring:

CHERRY, 2 year X X 1 inch up, also $\frac{3}{4}$, $\frac{5}{8}$ and lighter grades.

CHERRY, One year $1\frac{1}{16}$ up, $\frac{5}{8}$ & $\frac{1}{2}$ to $\frac{5}{8}$

Our Blocks of Cherry are largest to be found in U. S.

We bud annually 500,000 Cherry, they are making splendid growth.

Peach, One Year, all grades leading Varieties.

Plum, Japan and European, One and 2 year.

APPLE, 2 year, a few cars for late fall shipment.

Grafted Hardy Northern Pecans.

Car Lots a specialty, also fair assortment of Ornamentals.

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

We are entering one of the greatest periods of prosperity the Nurserymen have ever experienced.

Prices are rising on all Nursery products, especially on fruit bearing trees. It is the time to plant, and during the next few years enough apples cannot be planted to supply the trade. We are booking orders now for apple and pear stocks, our own growing. By placing your order now you are not only sure of securing what you will need but are sure also of getting them in time and in good condition.

The crop of seedlings is limited and the prices advancing. We strongly urge early orders to save disappointment later.

F. W. Watson & Co.

Topeka, - - - Kan.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERY STOCK

The National Nurseryman Publishing Co., Incorporated

Vol. XXVI.

HATBORO, PENNA. JUNE, 1918

No. 6



A nice specimen Pinus cembra

LAWN SPECIMENS

Unfortunately the Swiss Stone Pine, *Pinus cembra*, belongs to the five-leaved group which is under a cloud on account of the White Pine Blister rust, and is not being handled so freely by the nurserymen on that account.

It is such a distinct and desirable kind that it would be a pity if it were lost to our gardens. It should at least be preserved in those areas where there is no danger of it spreading the disease until such times as the disease is stamped out or dies out like most epidemics do. Nature is its own doctor in most cases in spite of the hysteria of men.

I have been watching an old orchard for the last five years that was infested with the once dreaded San Jose scale. It looked as if it were doomed but with no attention whatever in the way of pruning and spraying, the trees are coming back in great shape. This year they are full of blossoms and very different to what they were four or five years ago. The only reason seems to be that the trees have become immune or else the scale has lost its virility.

To return to the subject of our illustration, the Swiss

Stone Pine is a very slow growing kind, retaining its bushy conical shape for a great many years. The illustration is characteristic of its habit and represents perhaps 25 years' growth.

Being a native to the mountains of Central Europe and to Siberia, it is very hardy and what is better, adaptable almost to any climate for it seems to stand well in hot, dry situations. There are several varieties or forms, the most commonly seen in nurseries being more slender and symmetrical than our illustration.

There is no group of trees that have greater possibilities for the nurseryman and landscape gardener than the Pines and it might be added receive less intelligent consideration. With the exception of the Austrian, Scotch and the White Pine, they are little grown, yet no tree is more picturesque and ornamental.

As a nurseryman's plant, they grow into money quickly, but need constant transplanting to develop a proper root system for safe handling. Left to themselves, they make tap roots and big tops and quickly graduate to the brush pile.

Le Foyer du Soldat
Union Franco-Americaine

April 17th, 1918

Dear Editor:—

Having received the March National Nurseryman and seeing my name on your Honor Roll, I thought perhaps you would be interested in knowing what one nurseryman is doing within gun fire, near the front.

Having come to France with the Signal Corps and remaining with them a month, the entire battalion was broken up and scattered all over, my transfer was to the 13th Engineers.

Being more of a nurseryman than a railroader, my lot fell to taking care of the garden, which to me was a great privilege.

Having plenty of ground at my service, I laid out a vegetable garden, using what seed I could obtain from one of the largest French cities. I constructed a small hot bed and have radishes almost ready to eat. Tomatoes, cabbage, peppers and cauliflowers were started in flats and are doing exceedingly well, taking into consideration all the rainy weather we have had.

Now vegetables being a little out of my line, I turned my attention to making a small flower garden, in the formal design, using the native plants that are growing nearby and also a few flowers that I was fortunate to obtain.

The location of such a garden somewhat puzzled me, because a barrack and a bomb-proof dugout surrounded by fields, tracks and very few trees does not afford much of a place for a formal garden, but I figured that during the summer days and evenings most of the fellows would be somewhere near the dugout and my garden with its little rustic, vine covered summer house would be an ideal spot to rest and cool off between airplane raids, so as a result I laid my garden near to the dugout as the "Dugout Glide" is quite popular here.

Having outlined my garden, staking out the beds and

paths, I built my summer house and spaded up the flower beds, also building an arch as an entrance upon which I hope to train climbing roses, I used a beautiful specimen of *Picea excelsa* which I found growing near here. At the four corners I planted a specimen plant of *Crataegus*. At the rear of the summer house are grouped *Cornus*, *Lonicera*, *Symphoricarpos* and *Euonymus*. The entire garden will be outlined by a fence of sweet peas. I located a few plants of *Clematis*, which I will train over the rustic house. Iris is common here and that too will be transplanted to a new home.

Although subject to shell fire and constant danger of having the garden ruined, I feel it is my duty to make things as pretty as possible under the existing conditions and I thought you would be interested in knowing how the nursery spirit exists even under shell fire.

Sincerely,

HOWARD E. ANDREWS.

A CORRECTION

Harrisburg, Pa., May 10, 1918.

Reports have come to my attention that several nurserymen credit me with statements urging general prohibition of interstate shipment of nursery stock.

I hope there is no malicious motive in circulating such unfounded reports, for no such ideas have been proposed at any time, nor would they be given consideration by any right-minded inspector.

Only the occurrence of extremely dangerous pests in a district would warrant a prohibition of movement of affected or susceptible stock.

J. G. SANDERS, *Economic Zoologist of Penna.*

Acting President Mayhew's Letter to Nurserymen

To the Nurserymen of America:

This early may I urge every nurseryman the country over to attend the meeting of the American Association to be held in Chicago, Sherman House, June 26-28, 1918. It matters not if you have not heretofore been a member or if you have let your membership lapse, now is the best possible time to renew your membership, and any member will be glad to present your application. Many problems which affect your business can only be solved by combined effort, and for purely selfish reasons every worthy nurseryman in America should hold membership in the American Association.

Matters of very great importance will be determined by the Chicago convention. You should have a voice in shaping the future destiny of the Association. A study of the program as prepared by Chairman Chase and his committee proves that there will be "something doing" at Chicago every minute of the time. You can't afford to miss this program.

The age of the prophets is in the past, we are told, but this may or may not be true. It does not take a prophet to see some things however, because they look us squarely in the face.

(1) Prices of nursery products, wholesale and retail, must advance to save the business from bankruptcy. Compared to every other commodity under the sun, nursery products are, and have always been, the cheapest, and because of increased costs in labor, lands, material, etc., this to-day is our great problem, one which calls for the combined statesmanship of all to solve. In conversation with a leading nurseryman a few days since, he stated that it costs 100% more to produce trees in 1918 than it did in 1914. He was not far wrong.

(2) Our future policies must be shaped to meet our changing conditions. The world is to-day in the re-making. Policies which were counted dependable yesterday are today questionable, and tomorrow, perhaps, must be abandoned. The nursery business must be placed upon a more stable basis, we must inaugurate a system of research which will go to the very root of the matter. We must provide adequate machinery in our organization for getting at these problems and at the same time provide funds necessary to carry on the work.

(3) The nursery business must render a higher order of service. This is not saying, to be sure, that the character of service rendered in the past has not been acceptable. On the part of a vast majority it has been, but it can and must be improved. Our standards are not as good as they could be made. A ban must be placed on "shyster" practices in growing, grading, selling, advertising, etc., by the few, the result of which is borne by all. Every time an advertisement is printed it builds or demolishes the business. If it is 100% fact it is a power for good, first, to the concern who pays for it and, second, to dealers in nursery products generally. If, on the other

hand, it is false, it is an assassin's knife. Every case of "misbranding," every case of "under grading," each act of "unfair dealing," digs deeper the pit from which to climb. We must meet conditions as they are, call things by their true name, and, in the "name of business," demand righteousness in business.

(4) Market development. For many years much has been said concerning the need of a comprehensive, practical plan of publicity, a plan which would stimulate the planting of nursery products. Everybody realizes the need of market development as one of our biggest problems. A bunch of the "livest nurserymen in American Association" got together and worked out a plan to raise \$50,000.00 per year for five years for market development. This fund is growing rapidly and the committee having the matter in charge believe the fund will be fully subscribed. The entire plan will be ably presented at the coming convention.

These are some of the questions which will engross the Chicago convention, and any phase of the many questions hinted at would demand your presence.

At Detroit in 1915, the American Association of Nurserymen was reorganized. A new constitution was adopted, broad enough to do all things possible for the membership. However, as is now seen, adequate provision was not made to finance our organization. A thing which could not be foreseen in 1915 is quite apparent today. As a special order of business carried over from last convention, the resolution and amendment to constitution, as they appear in body of program, are offered for adoption by the Chicago convention, and are offered in the belief that their adoption will, (1) provide necessary funds for carrying on this great work, and, (2) to direct the Executive Committee specifically in matters where the Committee might hesitate.

I earnestly hope that these questions may have your best thought, and that every nurseryman in America will realize that all this is his business and that no proxies are allowed on the floor of the convention. Let us make 1918 convention the best ever held.

(5) Supplies. There are some things that, like the "nigger's bread," the nurserymen "must have," box lumber, shingle-tow, burlap, twine, etc. It begins to look at this date that not only will supplies be higher than the proverbial "eat's back," but it is also a question of procuring certain needed supplies at any price. I am led to this conclusion, especially concerning box-lumber and shingle-tow, by information coming to me from some of the largest mills in Louisiana who have heretofore supplied the nurserymen of the Southwest, and who advise me they cannot handle the trade the coming season. Every nurseryman should gather all possible information about where such items can be procured, and at what price, as such information will be invaluable at this particular time.

Yours very truly,

J. R. MAYHEW, *Acting President.*

Waxahachie, Texas, May 10, 1918.

Forty-Third Annual Convention of the American Association of Nurserymen

June 26th 27th and 28th 1918, at Hotel Sherman, Chicago, Illinois

Program

Meetings in Crystal Room—Exhibits in West Room (Adjoining Crystal Room)

WEDNESDAY, JUNE 26TH, 1918.

10.00 A. M.

Call to order by Vice-President.

Song "America."

Invocation—Rev. C. S. Harrison, York, Nebr.

"The Glad Hand"—Geo. M. Spangler, Jr.,

Association of Commerce, Chicago, Ill.

"A Message"—

Major Lloyd C. Stark

Report of Committees:

Arbitration—

W. C. Reed, Chairman.

Arboretum—

J. Edward Moon,

Chairman.

Complaints & Grievances—W. H. Wyman,

Chairman.

Distribution & Directory—M. R. Cashman,

Chairman.

French Relief—

F. L. Atkins, Chairman.

Hail Insurance—

Frank Weber,

Chairman.

Landscape—

Thos. B. Meehan,

Chairman.

Legislative—

Wm. Pitkin, Chairman.

Nomenclature—

J. Horace McFarland,

Chairman.

Press—Robert Pyle,

Chairman.

Statistical—

Henry B. Chase,

Chairman.

Tariff—Irving Rouse,

Chairman.

Transportation—Chas. Sizemore, Chairman.

Vigilance—Paul C. Stark, Chairman.

"Banish the Barberry and Save the Wheat"—

Dr. E. C. Stakman, St. Paul, Minn., Chairman.

Barberry Eradication Com., U. S. Dept. of Agriculture.

Appointment of Committees.

Announcement of Entertainment Committee.

Adjournment.

1.45 P. M. (Executive Session)

Song—"Star Spangled Banner."

1.50 Report of Secretary-Counsel—Curtis Nye Smith.

Report of Treasurer—J. W. Hill.

2.15 Address "Marketing Methods" (30 Minutes)

L. D. H. Weld, Mgr., Commercial Research Dept.,

Swift & Co., Chicago, Ill.

2.45 Special Order of Business—

Resolution and Amendment to Constitution—

(NOTE—That ample time be allowed for a full and free discussion of this most important matter, no

additional topics are scheduled for this session.

Program Committee)

Announcement of Meeting of State Vice Presidents.

Adjournment.

7.30 P. M. Meeting of State Vice Presidents.

8.30 P. M. Reception and Get-Acquainted Banquet.

THURSDAY, JUNE 27TH, 1918

10.00 A. M.

Song—"Where Do We Go From Here Boys?"

"Market Development"—

Report of Temporary Committee. (A matter of the utmost importance to the future of the Nursery industry—plenty of time will be given for full discussion.)

Report of Publicity Committee—F. L. Atkins, Chairman.

The Booklet "Home Grounds"

From the Publisher's Viewpoint, J. Horace McFarland.

From the User's Viewpoint, O. Joe Howard, Secretary Van Lindley Nursery Co., Pomona, N. C.

"Costs, Profits, and Income Tax"—Alvin E. Nelson, Swain Nelson & Sons Co., Chicago, Ill.

Discussed by: Arthur H. Hill, and Guy A. Bryant.

Report of State Vice Presidents and Election of Officers.

Adjournment.

1.45 P. M.

Song—"Over There"

"Personal Experiences in the Trenches"—

Officer from British Recruiting Station, Chicago, Ill.

"Fuel Conservation"—Mr. Osborn Monnet,

U. S. Fuel Administration.

"War Times and the Nursery Business."



MAJOR LLOYD C. STARK, Louisiana, Mo.
Commanding 2nd Battalion 315 Field Artillery,
Now stationed at Camp Lee, Va.
President American Association of Nurserymen

Four-Minute talks by—

E. C. Hilborn, North Dakota.
Windsor H. Wyman, Massachusetts.
R. D. Underwood, Minnesota.
J. R. Mayhew, Texas.

Adjournment.

THURSDAY EVENING: Meeting of American Nurserymen's Protective Association. Thos. B. Meehan, Secretary.

Meeting of Retail Nurserymen's Protective Association.
Guy A. Bryant, Secretary.

FRIDAY, JUNE 28TH, 1918

10.00 A. M.

"Standardizing the Bunching of Nursery Stock"

E. P. Bernardin, Parsons, Kansas.

"The Retail Salesman"—E. H. Smith.

Secretary, Harrison Nursery Co., York, Nebr.



HOTEL SHERMAN, CHICAGO, ILL.

Final Report of Committees.

Resolutions.

Unfinished Business.

Song—"America."

Adjournment.

Sears, Roebuck & Co. have extended a cordial invitation to the American Association of Nurserymen to visit their plant in a body, on Friday afternoon; details as to time, directions, etc., will be announced before adjournment.

ENTERTAINMENT

In the opinion of the Entertainment Committee the time has come for the American Association to adopt the plan now generally used by all Trade Associations in that each one pays his way, otherwise a considerable fund must be taken from the Treasury or subscribed by local nurserymen to defray the expense of entertainment—a plan that by experience we have found to cause embarrassment, to say nothing of the burden placed on the local members. The entertainment features at Chicago will include:—

Wednesday noon (12.30) Luncheon by all ladies in attendance at Marshall Fields & Co. (Narcissus Room) followed by a tour through that mammoth establishment under the personal conduct of trained guides. The hour of departure from Hotel Sherman, cost of luncheon, etc., will be announced by the Entertainment Committee.

Wednesday Evening: (8.30) Reception and "Get-Acquainted" banquet—time, place and cost to be announced.

Thursday Morning (10.00) Trip through Art Institute. 12.00 Luncheon at Art Institute Cafeteria.

1.30 Leave C. & N. W. Depot for Great Lakes Naval Training School.

8.15 P. M. Theater Party "Friendly Enemies" at Woods' Theater (only one block from Hotel.)

Friday—Morning left open.

Afternoon—the ladies are invited to visit (along with the men-folks) the establishment of Sears, Roebuck & Co.

The women of the American Association of Nurserymen will hold their third annual meeting at Chicago, and a larger attendance of ladies than ever before, is expected. This "Ladies Auxiliary" will have charge of the music, reception and entertainment features. Is your wife, mother, sister or sweetheart a member of this most helpful co-operative organization of the American Association? H. B. CHASE, *Chairman Program Committee.*

THEATRE PARTY

Annual Convention, American Ass'n of Nurserymen

The entertainment committee of the American Association of Nurserymen proposes a theatre party of the members and guests for Thursday evening, June 27th, the play being "Friendly Enemies" which, it is stated, received the endorsement of President Wilson and is one of the most popular plays now in Chicago.

It is necessary to secure reservations of seats three or four week in advance. Consequently members desiring to buy tickets should immediately send their reservations to Mrs. Clyde Leesley, 6100 W. Crawford avenue, Chicago, Ill., a member of the Entertainment Committee.

Alvin E. Nelson, Chairman of the Committee on Exhibits, reports that all arrangements have been made for a very fine display. The exhibits will be staged in the west room of the Sherman Hotel, adjoining the Crystal room in which the meetings will be held.

Permission has also been obtained from the Superinten-

dent of both Lincoln Park and Garfield Park on the west side, for parking space for the exhibition and demonstration of tractors, power sprayers, etc.

Shipping Instructions for Exhibits

Those sending exhibits should address them to Alvin E. Nelson, Chairman of Exhibits, care of C. O. Olson Cartage Company, 525 West Chicago avenue, Chicago, and send the bill of lading to that address. This is very important as the railroads have now a rule that no shipments will be delivered to carrying companies without the bill of lading. Bills of lading should be marked just where the exhibit is to go, either Sherman House or Park.

ANNOUNCEMENT

The women of the American Association of Nurserymen will hold their meeting at the Hotel Sherman on the same dates as the American Association of Nurserymen, June 26th to 28th.

This auxiliary organization was formed at Milwaukee, Wis., in 1916. The wives, daughters, sisters and mothers of nurserymen are urged to become members. The dues are one dollar per annum payable June first or not later than convention time. Guests may participate in the entertainment provided by our association upon the payment of one dollar and will have the same privileges as a member of the organization.

The objects of the Women's Organization are to further personal acquaintance and promote sociability among its members. To arrange to see the different points of interest to the best advantage in the cities where we meet. To promote the interests of the women in the work of the American Association of Nurserymen.

The members of our organization had a splendid meeting at Philadelphia and our trip there was not only entertaining and pleasant, but educational as well. We hope there may be a large attendance of the ladies at the Chicago convention, and we are sure that you will find it pleasant and profitable to meet with us and become members of our organization.

Remember that your friends and guests are welcome. We hope we may have a good attendance of the men at the theatre party and that all the men present at the convention will attend our reception at the Hotel Sherman from 5.30 to 6.30 p. m. Wednesday evening.

OFFICERS FOR 1918

Mrs. E. S. Welch, Shenandoah, Iowa, President.
Mrs. W. C. Reed, Vincennes, Ind., Vice President.
Mrs. E. R. Taylor, Topeka, Kans., Secretary.
Mrs. F. W. Watson, Topeka, Kans., Cor. Secretary.
Mrs. E. E. May, Shenandoah, Iowa, Treasurer.
Mrs. Clyde Leesley, Chicago, Ill., Chairman of the Entertainment Committee.

RECEPTION COMMITTEE

Miss Florence Hill, Dundee, Ill., Chairman.
Mrs. Wm. Saddler, Bloomington, Ill.
Mrs. W. N. Searff, New Carlisle, Ohio.
Mrs. T. J. Ferguson, Wauwatosa, Wis.
Mrs. Peter Youngers, Geneva, Neb.

MUSIC COMMITTEE

Miss Augusta Taylor, Topeka, Kans.
Miss Lucile Searff, New Carlisle, Ohio.

PROGRAM

Wednesday, June 26th

Opening meeting, Hotel Sherman, 8.30 to 10.00 a. m.
Luncheon at Marshall Field & Co. 12.30 Narcissus Room
A tour with guides through store 2.00 p. m.
Hotel Sherman, Reception and Tea for the Gentlemen.
5.30 to 6.30 p. m.
Dinner at Terrace Gardens, 8.30 p. m.

Thursday, June 27th

Trip through Art Institute, 10.00 to 12.00 p. m.
Luncheon at Art Institute Cafeteria, 12.00 p. m.
Leave at 1.30 p. m., C. & N. W. Depot for Great Lakes
Naval Training School.
Theater Party "Friendly Enemies," at Wood's Theater.
8.15 p. m.

Friday, June 28th

Meeting Hotel Sherman, closing session, 8.30 a. m.
Day left open.

EXHIBITION SPACE

Chicago Convention of the American Association of Nurserymen.

Arrangements have been made by Mr. Alvin E. Nelson (Swain Nelson & Sons Co., 140 S. Dearborn St., Chicago) Chairman of the Committee on Exhibits of the American Association of Nurserymen, for very satisfactory exhibition space for exhibits (of members only) in the Hotel Sherman, Chicago, where the annual convention occurs on June 26th-28th.

Believing that it would be of great interest to the members attending the Convention to have a good exhibition of Tractors and power sprayers suitable for nursery work, Mr. Nelson has conferred with the Chicago Park Board for the purpose of securing storage and spaces for exhibition and demonstrations of these implements in some one of the parks. A definite answer has not yet been received, but Mr. Nelson is convinced of his success in securing the co-operation of the Park Board.

Mr. Nelson has also provided that exhibitors may bill their exhibits, transportation fully prepaid, giving liberal allowance for delays, to Mr. Alvin E. Nelson, Chairman Nursery Exhibits, care of C. O. Olson Cartage Co., 525 W. Chicago avenue, Chicago, Ill. The Bill of Lading, upon which must be stated whether the article is for exhibition in the Sherman Hotel or in the Park, must be sent to said Olson Company. Of course, all charges of the Olson Company are to be paid by the exhibitor.

If plants to be exhibited require to be kept in cold storage until the opening of the Convention, the Olson Company must be advised of such requirement.

For rates of charges for exhibition space, either for the Hotel or Park, consult Mr. Nelson, address first above given.

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by

THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

Advertising rates will be sent upon application. Advertisements
should reach this office by the 20th of the month previous to the date
of issue.

Payment in advance required for foreign advertisements. Drafts
on New York or postal orders, instead of checks, are requested by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., June 1918

Subscribers to "Nurserymen's Fund for Market Development"

THE COMING CONVENTION Never was a convention held under
conditions so unusual and so pregnant
of things of vital importance to the fu-
ture welfare of the business.

It has been said of war "that it wipes out the past and
reduces the future to a speck." In a sense this is the
condition of the nursery business. The past is wiped
out and the future is very circumscribed at present, but
no sane and sound American believes for a moment that
the German Kaiser and his crew are going to afflict the
world much longer.

It is safe to assume that our business is now reduced
to its lowest ebb and the flood tide will be just so strong
as the nurserymen themselves plan to make it.

It is a source of gratification that most nurserymen are
aware of this, especially those unselfish workers in the
National Association.

If the convention does nothing else but bring nursery-
men together to formulate plans to further the co-opera-
tive Market Development Movement it will be more pro-
ductive of good than any previous one.

LABOR SHORTAGE The shortage of labor during the
past season has brought the nur-
serymen face to face with condi-
tions that are entirely new. From all indications there is
not going to be very much relief in the near future. Ex-
perience has taught them to use every available means
to get the work done and they have used means and done
things they would not have dreamed of doing two or three

years ago. There has just come to hand a letter from the
Womens' Land Army of America, formed for the pur-
pose of aiding in the increase of food production, by
sending units or groups of strong and conscientious wo-
men to work on the farms wherever they can help in the
present labor shortage.

Why should not the nurserymen utilize to a very much
greater extent female help on the nurseries? While per-
haps they would not have thought of it a few years ago,
conditions are changing so rapidly and women are prov-
ing their efficiency and adaptability in so many lines that
were hitherto filled exclusively by men.

There is a great deal of work on a nursery which may
be done by female labor. In fact, it is much more suit-
able than many lines such as the machine shops, con-
ductors, munition plants and factories. There is not the
slightest doubt that if nurserymen would so organize
their equipment, women workers could be used to very
great advantage.

Nurserymen and planters in the province of Victoria,
Australia, are much concerned over a fungous disease
which is attacking the Oriental plane. This tree seems
to be one of the most popular street trees in Victoria and
is largely used in Melbourne and other cities. Efforts
are being made to combat the disease by fungicidal
sprays and pruning out the diseased parts. At a con-
ference of nurserymen and curators, it was stated that the
same disease was very prevalent in parts of America and
had been reported many times in Europe. There also
seems to be the same controversy as to whether the
damage was really caused by a fungus or was due to late
frosts or uncongenial weather conditions. It is presum-
ably the same trouble that may be noted in various parts
of the States which affects the Plane trees in early spring
soon after the leaves come out, they shrivel and turn
brown and are invariably replaced by a new crop. The
tree apparently is not much the worse for the check. It
is possible that this disease has a more serious effect in
Australia. It is also noted that where they are growing
in smoky atmosphere such as near manufacturing cities
they are not so likely to be affected. It is presumed the
sulphur in the atmosphere is a beneficial check to the
fungus, which causes the trouble. Possibly this accounts
for the popularity and the satisfaction this tree gives in
the vicinity of London where it is so largely planted and
is known there as the London Plane.



Obituary.

JAMES B. McARDLE

James B. McArdle, for many years a traveler for the
Vaughn Seed Store in New York City, and for the past
eight years conducting a seed, florist and nursery bus-
iness in Greenwich, Conn., died at Tucson, Arizona. Mr.
McArdle went there for his health. He is survived by a
widow and three children.

Deans of the Nursery Business

John Van Lindley, proprietor of the Pomona Hill Nurseries, Greensboro, N. C., has just presented that city with a beautiful forty acre tract of woody land which will be utilized as park and playgrounds.

The park is to bear the name of the donor and will be an everlasting monument to his memory.

Mr. Lindley is of old English stock, his ancestors coming to North Carolina from England by the way of Ireland and Pennsylvania.

Thomas Lindley, his father's grandfather, with his

Judith Henly, died, leaving him a boy of only eight years of age. His father, Joshua Lindley, was a fruit grower and nurseryman, and young John grew up on the fruit farm, and all his life has been practically engaged in rearing trees, and has thus been enabled to give to this vocation the experience garnered through youth and matured years. This doubtless has been the foundation of his remarkable success in a sphere where many others have failed. Though slight in frame and delicate in appearance as a boy, he had stamina, and the manual labor



John Van Lindley

wife, Sarah Evans, who was of Welch descent, was the first of the family to come to North Carolina, settling here in 1748, and although Mr. Lindley is not a native of this State, having been born in Monrovia, Morgan County, Indiana, November 5, 1838, the accident of birth was speedily remedied by his return with his parents, when only three years old to his father's former home in Chatham County, where a few years later his mother,

of his farm life tended to strengthen his constitution. Of his proficiency as a workman in those early days he was very proud, and he still finds pleasure in recalling that he split 800 rails the last day he used a maul.

Joshua Lindley with his family moved from Chatham to New Garden in Guilford County, in 1851, and continued there the nursery business.

Close application to his occupations left him little op-

portunity for study, and one year at the New Garden School completed the limited college course for which he had leisure, outside of the lessons in pomology and horticulture learned in farm and garden. Toward these pursuits both natural and inherited tendency led him, and he threw himself into them with all the ardor and earnestness which have been his characteristics through life. Soon after arriving at manhood the war between the States broke out, and Lincoln's call for troops forced every Southern man to make decision as to the side with which his sympathies lay. Mr. Lindley chose to espouse the Northern cause, and although of Quaker parentage, both father and mother being members of the Society of Friends, he fought bravely for three years as a private in the regular cavalry of Missouri, in the Federal army.

Returning at the close of the war to his old home, he was received with open arms and unchanged affections by those old friends who had stood loyally to their State in the struggle.

His father had remained at home, and was, like every other Southern planter at this period, much impoverished, and his son found him owing \$5000, indebtedness incurred during the war.

In 1866, soon after the war, New Garden Nursery, known as Joshua Lindley & Son, was re-established, and so well did the undertaking prosper, that in ten years, his object being accomplished, and his father's estate cleared of debt, Mr. John Van Lindley was in future able to devote his energies to the building up of his own fortune.

When a young man he had traveled widely in the Western States and visited many parts of the Union, seeking the locality in which a poor man might best make his home and fortune, and had returned to North Carolina convinced that here was the best place possible for that purpose.

In 1877 he began business as sole proprietor of the J. Van Lindley Nursery, without other capital than the stock of good credit which comes from a long continued course of care, promptness and honorable dealing; and this good credit proved most useful when, two years later unexpected opposition rose, and a combination was formed against him, to meet which it was necessary to increase his funds and enlarge his business. He borrowed money without difficulty, and at the end of the year wound up with a larger trade and a heavier balance in his favor than ever. He did more; not only had he met the opposition and won the victory, but he had met the enemy and won them as friends. Since their establishment, nearly forty years ago, the J. Van Lindley Nurseries have steadily grown, and have developed into the leading nurseries and cut-flower business of the State and of the South, giving employment to a multitude of salesmen and nurserymen and bringing to their owner a fine income and an ever-increasing capital.

But it is not only as a successful horticulturist that Mr. Lindley is known and respected; he is also one of the most public spirited of men, and is in the forefront wherever zeal and intelligent energy are needed or a leader required in efforts to further the interests of State or county.

Mr. Lindley's name is connected with many and varied

interests which have aided materially in the prosperity of Greensboro and that part of the State. Mr. Lindley is president of the Underwriter's Fire Insurance Company, Greensboro, and was president of the Security Life and Annuity Company of Greensboro, until it was merged with the Jefferson Standard, of which he is one of the Vice Presidents, and is president of the J. Van Lindley Nursery Co., of the J. Van Lindley Orchard Company of Southern Pines, and of the State Horticultural Association. He is a director of the Southern Life and Trust Company, of the Vanstory Clothing Company, Odell Hardware Company, Southern Stock Mutual Fire Insurance Company, Home Fire Insurance Company, Southern Underwriters' Fire Insurance Company and of the Pomona Cotton Mill Company.

Mr. Lindley is one of the Executive Committee of the North Carolina Agricultural Society, and is stockholder in many other industrial organizations.

He is thus interested in many enterprises of importance, and his name is identified with every undertaking that conduces in any way to the growth in prosperity and in the material and intellectual advancement of the community in which he lives.

Yet among his multifarious interests, first in his heart are ever the nurseries. At Pomona there are several hundred acres devoted to trees and young plants, and there are seventeen greenhouses for flowers; also about 1000 acres in nursery and farm at Overhills, North Carolina, a branch nursery started about five years ago, while at Southern Pines and at other points he has large orchards.

PRESENTATION TO MAJOR LLOYD C. STARK

How much the nurserymen esteem Major Lloyd Crow Stark, the President of the National Association of Nurserymen, is indicated by a pleasant incident that recently took place when Major Stark was presented with a handsome sword.

The blade of the sword itself bears the inscription "U. S. Lloyd Crow Stark" and the scabbard is inscribed "Presented to Major Lloyd C. Stark, President, American Association of Nurserymen, 1918." It is very handsome and of the regulation U. S. Army style and the scabbard is heavily mounted with silver trimming but yet complying with the Army regulations.

The Committee appointed to make the presentation were William Pitkin, E. S. Welsh and John Watson.

Information for Fruit Growers about Insecticides, Spraying Apparatus, and Important Insect Pests. By A. L. Quaintance, Entomologist in Charge of Deciduous Fruit Insect Investigations, and E. H. Siegler, Entomological Assistant. Pp. 99, figs. 74. Contribution from the Bureau of Entomology. (Farmers' Bulletin 908.) Price, 15 cents.

Gives directions for the preparation and use of the more important insecticides necessary in combating the various insect pests of orchards, vineyards, etc., as well as other information of use in preventing or reducing insect losses to these crops.

SHALL THE UNITED STATES PROHIBIT THE IMPORTATION OF SEEDS, PLANTS, BULBS, AND NURSERY STOCK?

Again the proposition to prohibit the importation of seeds, bulbs, and nursery stock has come to the front, the Federal Horticultural Board having called for a public hearing on the question, and which was held in Washington on May 28th.

It brought together many prominent Entomologists, Foresters, and the Legislative Committee from the Society of American Florists, Wm. Gude, Chairman, and the American Association of Nurserymen, William Pitkin, Chairman accompanied by John H. Dayton, James M. Pitkin, Thomas B. Meehan, and Curtis Nye Smith, Counsel of the Association, and a large number of representatives from bodies directly or indirectly interested in the subject.

Mr. C. L. Marlatt, Chairman of the Federal Horticultural Board opened the meeting with an outline of its objects, which had previously been distributed in circulars under date of March 28th, and May 8th, in part as follows:

"The following statement has been prepared for the information of persons interested in the public hearing called for May 28, 1918, on the proposed restrictions or prohibitions with respect to the importation of plants and seeds from foreign countries. It includes a tentative outline of the subjects to be given special consideration at the hearing without, however, limiting to such outline the scope of the discussion.

"The need of additional restrictions or prohibitions, particularly with respect to the entry of certain classes of nursery stock and other plants and seeds on account of exceptional risks involved, has been under consideration by the Federal Horticultural Board for some time. This consideration has had relation particularly to (1) plants imported with earth about the roots or "balled" plants and (2) plants and seeds of all kinds for propagation from little-known or little-explored countries. The large risk from importations of these two classes of plants comes from the impossibility of properly inspecting plants with earth or of disinfecting the attached earth; and from the dangers which can not be foreseen with respect to plants coming from regions where plant enemies—insect and disease—have been studied very meagerly or not at all. Inspection of such material is necessarily in the blind, and the discovery of infesting insects, particularly if hidden in bark or wood, or of evidences of disease is largely a matter of chance. The inspection and disinfection of both of these classes of plants as a condition of entry, therefore, is a very imperfect safeguard. It should be noted that the seeds referred to above have special relation to the seeds from little-known or little explored countries, and it is not proposed to restrict at this time the importation of vegetable, flower and field seeds, normally the subjects of commercial importations.

"The discussion of these and other phases of the plant-import problem by the various committees representing the Association of the Horticultural Inspectors of the United States and other associations and societies interested in plant protection has developed a strong sentiment for greater restrictions on the entry, particularly of the classes of plants just described. This sentiment took definite form in a series of resolutions adopted by the Section of Horticultural Inspection of the American Association of Economic Entomologists at its Pittsburgh meeting January 1, 1918. These resolutions were the result of a general conference participated in by representatives of the American Phytopathological Society and entomological and pathological inspectors of the Federal Horticultural Board. This action was taken in response to a request by the Board that a conference on this general subject should be called to include all the interests affected and that as a result of such conference definite recommendations should be presented to this Board. These recommendations are as follows:

"Whereas our country is now and has for many years suffered serious financial loss from the depredations of insects and plant diseases that have come to us from abroad,—the annual damage by a single insect in some cases being greater than the total value of all nursery stock imported in the course of a year; and

"Whereas the means of communication between the countries

of the world have developed to a point that all regions are now reached through the regular channels of commerce in a portion of the time formerly required; and

"Whereas by reason of this great improvement in transportation, species of injurious insects now confined to foreign countries, are certain soon to be introduced into our country through the importation of foreign plants; Be it resolved:

"1. That the importation of all 'nursery stock' as designated in the Federal Plant Quarantine Act of August 20, 1912, should be prohibited except as brought in under carefully guarded quarantine regulations of the U. S. Department of Agriculture.

"2. That an absolute embargo against nursery stock coming in with soil about the roots should be placed at once.

"3. That the prohibition against all other kinds should be placed with due regard to the time necessary to enable the businesses affected to adjust themselves to the change, after which absolute prohibition should obtain.

THOMAS J. HEADLEE,

GEO. A. DEAN,

E. D. BALL,

Special Committee."

The above resolutions were submitted by the Board to the Bureau of Plant Industry of the Department of Agriculture with the request that the experts of that Bureau prepare a general recommendation on the subject of the exclusion of nursery stock. In that connection, consideration was also given to a bill which had been introduced in the Senate, providing for the prohibition of the importation of nursery stock, effective July 1, 1918. As a result of this request the following memorandum was prepared about the end of January for use in answering various letters of inquiry received by the Department on the subject of exclusion of foreign nursery stock.

Numerous inquiries have been received by the Department regarding the prohibition, in order to prevent the introduction of insect pests and plant diseases, of the importation of nursery stock into the United States, except for experimental or scientific purposes by the United States Department of Agriculture, effective July 1, 1918.

The experts of the Department have given careful consideration to this matter and also to the proposal regarding the immediate exclusion of certain classes of nursery stock and the exclusion of other classes after the expiration of a reasonable period to permit adjustment of the interests affected.

As to the need of additional Federal plant quarantine powers, it may be pointed out that the Federal Plant Quarantine Act of 1912, as amended, gives authority to enforce any prohibitions or other restrictions on the importation of nursery stock or other plants and plant products necessary to prevent the introduction of insect pests and plant diseases. Under this Act there are now in force 11 foreign quarantines prohibiting, and eight orders regulating, the entry of plants and plant products. This Act includes not only the plants actually described as "nursery stock," but also any other class of plants or plant products the entry of which it may be desirable to restrict or prohibit. Furthermore, wherever the necessity therefor arises, in order to prevent the introduction of dangerous diseases or insects, the importation of whole classes of plants, or those coming from specified world regions, can be prohibited or regulated.

As a result of the consideration which the experts of the Department have given the matter, it appears very doubtful whether the horticultural development of this country has reached the point where the complete exclusion of foreign nursery stock in order to prevent the introduction of diseases and insects could have other than harmful effect. Precipitate action at this time would give no opportunity for readjustment to those phases of the industry which would be most seriously affected and would greatly handicap plant propagators of the United States and work financial injury to many branches of horticulture. At the present time there is no available supply of stocks in this country for the production of many kinds of fruits and ornamentals, nor is it possible now to obtain from domestic sources seeds from which several of these stocks can be grown.

The situation, therefore, calls for constructive action. Before any general program of exclusion, if such should be necessary to protect this country against insects and plant diseases, could be intelligently considered, more information is needed concerning the importations now being made, necessity therefor, as well as the existence and geographical distribution of foreign plant parasites likely to be introduced with such importations. This information is now being accumulated by the branches of the Department dealing with such matters. The Bureau of Plant Industry is extending its studies of nursery problems to secure definite information regarding the kinds and quantities of plant material grown abroad and introduced as seeds and stocks or materials for forcing; the practicability of growing these seeds and stocks and

other plant materials in this country; encouragement of local activities for the production of plant materials we now import—including seeds for such stocks as pear, peach, cherry, apple, and other fruits; and the determination of localities in the United States where stocks and similar plant materials may be successfully grown. Several field stations, well located, equipped and organized, are already available for this work, and valuable records, the accumulation of nearly 20 years' world-wide explorations, also are at hand for immediate use.

Much of this work will be carried out through the Office of Foreign Seed and Plant Introduction of the Bureau of Plant Industry. This Office is charged with all matters relating to the introduction for this Department of foreign seeds, plants, bulbs, etc., for scientific and experimental purposes and cooperates with the Federal Horticultural Board in maintaining facilities for inspection and quarantine. This Office has already been the means of introducing, testing, propagating and distributing many new plants, including among these a number of promising disease-resistant pears, peaches, cherries, roses, and other plants which are now being propagated and tested preparatory to their more widespread use.

The experts of this Department feel that every reasonable effort should be made to stimulate the propagation in the United States of necessary plant stocks in order to eliminate the danger of bringing in dangerous plant diseases and insect pests. In any event, if, in order to protect this country against such plant diseases and insects, it should become necessary to consider the complete exclusion of nursery stock, the matter should develop gradually, affording opportunity for adjustment, rather than result from immediate and drastic action. In the meantime, under the existing Plant Quarantine Act, quarantine action in addition to that now in force can be promptly taken as to any plant or class of plants or plant products whenever it is evident that the danger outweighs the sacrifices involved.

Following up this memorandum the Board addressed a specific inquiry to the Bureau of Plant Industry for a report on the advisability of the exclusion, either immediate or graduated, or "balled" plants or plants with earth about the roots and plants from little-known or little-explored countries of the world. In response to this inquiry Dr. B. T. Galloway, Plant Pathologist of the Bureau of Plant Industry, submitted to the Board, February 26, 1918, a report based on reports by a number of experts of that Bureau. This report contained the following recommendations relative to entry of the two classes of nursery stock designated:

PROVISIONAL RECOMMENDATIONS OF THE BUREAU OF PLANT INDUSTRY

A. That all foreign grown balled, tubbed, or potted plants, except as noted under B, be excluded in accordance with the following groups and date:

Group 1.—Azaleas, Rhododendrons, Palms, Araucarias, Bay Trées, Hollies, Ericas, and Acacias, January 1, 1923.

Group 2.—Conifers, dwarf and other kinds, Buxus, etc., usually shipped as specimen plants, July 1, 1919.

Group 3.—Small potted plants, including Roses, Chrysanthemums, Violets, tender bedding plants, Ferns, tropical and sub-tropical plants, etc., January 1, 1919.

Group 4.—Clumps of hardy perennials used in forcing, Japanese Maples, Magnolias, etc., July 1, 1919.

B. That provision be made for the admission of limited numbers of new varieties or novelties out of pots not exceeding two inches in diameter, this work to be conducted through the Department under rules and regulations prescribed by the Federal Horticultural Board.

C. That no action be taken at this time toward the exclusion of all stock from the Orient, and other little explored parts of the world, but that steps be taken looking toward action in the near future of excluding certain groups of plants, especially from the Orient.

These recommendations are presented for discussion, but, as indicated in the opening paragraph of this statement, are not to be taken as limiting the scope of discussion nor the ultimate action of the Department.

In connection with the subject of this hearing, attention perhaps should be again drawn to the undoubted adequacy of the quarantine and other restrictive powers now embodied in the Plant Quarantine Act of 1912 as subsequently amended, specifically referred to in the memorandum quoted on pages 3-4. These powers are unquestionably adequate for all needed prohibitions or restrictions on the importation of nursery stock and other plants and plant products to prevent the introduction of insect pests and plant diseases. The important requirement is the determination as to each subject of the actual need of such prohibition or restriction.

C. L. MARLATT, Chairman Federal Horticultural Board.

To those who have kept informed of the opinions and actions of such bodies as the Association of Horticultural Inspectors, The American Forestry Association and similar organizations, all of which were largely represented, it goes without saying that the weight of the discussion was in favor of early and complete exclusion.

It is entirely fair to say, however, that the Federal Horticultural Board expressed no opinion either for or against it. Mr. Marlatt, in the opening address having stated that the members of the board were there to hear both sides of the question, and that later, the subject would be taken under advisement, not only by the Board but that all heads of the several Bureaus under the Department of Agriculture would be called into the conference.

Mr. Marlatt further stated that he had received a number of unsolicited letters from nurserymen in the country who gave hearty endorsement to the general views expressed in the circular sent out by the Board.

Lack of space will not permit a full report of the hearing, but the following are some of the most interesting and important statements made by the several speakers.

Mr. C. L. Marlatt:—The grave danger is of bringing in insects in balls of earth which it is impossible to inspect, and also plants from countries where there is little opportunity for inspection. The Board does not at this time contemplate putting an embargo on field, flower or common vegetable seeds which have been coming into the country for a number of years, and which can readily be inspected and safeguarded.

Mr. Farquhar:—It has been said that Azaleas and Rhododendrons are now being grown in California in large quantities, but not one of these plants was propagated there. They were imported as small plants from Holland and Belgium several years ago, and have been grown here to merchantable sizes. In Europe, the area from which Nursery Stock is imported is very small, and he advanced the suggestion that it would be possible for the Department of Agriculture to send competent and experienced investigators to the nursery producing sections, to examine not only the nursery stock, but also the earth in which the stock is grown, and where sections are found free from dangerous insect pests or diseases permits could be issued. As large amounts of money are being spent, it would be wiser to use it in this manner than to ruthlessly cut off from America the source of supply to nurserymen and florists of these very important plants. The trade is willing to suffer, if necessary, that the country be protected but wants to be sure that the real danger exists.

Prof. Cook, N. J.:—The American Forestry Association, after considering the "Provisional Recommendations of the Bureau of Plant Industry," approved of these recommendations with certain exception as to Japanese Lily Bulbs, and that there be total exclusion as soon as it could be made economically possible.

State Inspector, Alabama:—Reason for attending the hearing was to ascertain the position relating to fruit stocks. He found Native grown stocks inferior to the imported, and cannot establish the Nursery business in Alabama unless they can get clean stock.

Prof. Headley, N. J.:—The gravest danger is from the importation of evergreens and other plants with balls of earth which may contain dangerous and injurious insects. A certain importation of Japanese Iris with earth about the roots, brought in the Japanese beetle, similar to the rose bug, which is now spread over an area of two thousand acres. Has found as many as twelve to fourteen of these bugs in one square foot of earth. It is a general feeder, attacking a large list of vegetable plants. New Jersey had appropriated \$15,000 to be used in the endeavor to exterminate this insect. Two years ago, he made a study of insects found in imported balls of earth, and found twenty of such injurious insects. He realizes that we are facing enormous loss to florists in cutting off the importation of such plants but we must consider the immediate danger, and we would be neglectful of our duty if we allowed the door to be open. He favored immediate action on the proposition to immediately stop the importation of plants with balls of earth.

Norman Taylor,—representing the International Garden Club:—He takes a middle position, and inquired if there was not some other way rather than total exclusion. He suggested that a quarantine might be established at the several Ports of Entry or that some other plan might be devised by the Federal Horticultural Board by which diseases and insects might be prevented from coming into the country, rather than to exclude the importation of nursery and florists' stock.

Dr. Pratt, in charge of the nursery of the Department of Agriculture:—The whole subject involves four or five very important questions. The exclusion of foreign Nursery stock meant the complete shifting of Horticulture. Through Dr. Wilson, many new and valuable plants are being introduced by The Department of Agriculture, and as these plants become in general cultivation it will change the character of our nursery products. It will be

up to the nurserymen and florists to use these new introductions and our native plants rather than the products of foreign countries. It would be necessary for the Department to enlarge the productions of these new introductions so that every nurseryman can get the stock he needs but the government must help. If we are discussing only certain areas in Europe, where general nursery stock is cultivated, then perhaps the Federal Horticultural Board might be able to make some arrangements for inspections on the grounds but could not do so in widely separate or little known countries.

A. B. Hastings:—The White Pine Blister Rust could not be kept out by inspection.

Mr. Norgood, Wisconsin:—The White Pine Blister Rust came to Wisconsin from direct importations and could have been prevented by competent inspection at the coast. He finds the greatest difficulty with foreign shipment but Wisconsin Nurserymen are very willing to assist the inspector in every possible manner. Wisconsin believes now it is too expensive to leave the door open, and that now, when little importations can be made on account of the war it is a good time to see if we cannot get along without foreign stock. He wants the United States to uphold all restrictions necessary to prevent the introduction of foreign insects and diseases.

Mr. Lupton:—Chairman Legislative committee, Virginia Horticultural Society. In favor of excluding everything except stock brought in by the Department of Agriculture.

William Pitkin:—Representing the American Association of Nurserymen. His committee came to the meeting with an open mind excepting in one respect. The Nurserymen are for America first, they want to join with the Federal Horticultural Board to properly safeguard the interest of the country. We may differ in details but we are working on the same lines, and to get results. America today does not produce sufficient material to supply the American Trade, and must rely on Europe for the balance needed. We should carefully take up several questions and decide if certain articles should be excluded now, or at some later date, and determine if it is possible to increase production in this country of necessary stock now grown for us in Europe. The Board should also bear in mind that the nursery business should not be inflicted at this time with additional burdens. Just now it is announced that freight rates are to be advanced twenty-five per cent,—slow and difficult movements of freight this spring and the general depression in the nursery trade has already put the nurseryman in an unenviable position. There is perhaps only one thing that the nurseryman does not have to worry about. He does not have to think of the Excess Profit tax. A lot of these problems now under consideration, the nurseryman has been trying to work out for the last half century or more and without success, and we now feel that they should be taken up by the Department of Agriculture and its experts. The successful methods of propagation of a lot of things are unknown in this country, we have been trying for many years to grow fruit seedlings, but with the exception of Apple seedlings none of these efforts have been successful. Native grown stock, in the minds of many experienced nurserymen, do not produce as good a tree as when grown on French Stocks. One nurseryman checked up a block of 50,000 Apple trees grown on Native stocks with an equal number of trees grown on French stocks. The yield of first class tree was only forty per cent on the native stock, while there were seventy per cent on the French stocks. Almost every nurseryman finds the same results. We do not want to say that these plants can not be produced in this country,—we have tried and have failed, now we feel that the Department of Agriculture should spend the necessary money, no matter how great the amount, to show us and prove to us how to produce this stock in commercial quantities, and when they have succeeded where we have failed, we will only be too glad to give up the foreign stock. Recently a nurseryman said he had been looking over a block of 100,000 American grown Mahalebs. Not over twenty-five to thirty per cent were showing satisfactory growth, and probably not over ten per cent of these will have sufficient vitality to permit budding when the proper season arrives. These stocks were grown in Kansas. The apparent cause of the poor growth is the lack of maturity of the stock when the time comes to dig them in the fall. The Department of Agriculture spends enormous sums annually in helping the farmer, and it seems only proper and right that some of this money should be spent in solving these problems for the nurseryman, but until they do solve them it is not fair to take away the material we now must procure from Europe, and seriously cripple the nursery and orchard industry of this country. The question of total exclusion is not all one sided. At a meeting of the New York Horticultural Society held in Rochester, N. Y., last winter, a resolution was passed in opposition to the Weeks Bill which at that time was being seriously considered in Congress. If the matter of exclusion is not wisely handled it means a large increase in the cost of producing fruit trees, which increase must naturally be passed on to the farmer and orchardist. The whole question should be thoroughly sifted, and some efforts made to determine if adequate inspec-

tion can not be made rather than total exclusion and certainly until it can be determined that this stock can be commercially produced in this country present conditions should remain undisturbed. Is the danger going to be a very great element if the matter is given rest until such time as matters can be arranged? It is going to be a serious proposition to our Allies who are fighting our battles for us, if we shut down on their products. As to immediate danger of insects in balled plants, a letter from Professor Phelps of Massachusetts does not appear to reflect any great worry about introduction of pests in that manner. In conclusion we say, we want to be educated, we want thorough inspection, and Federal aid in educating us in what we need to do to produce all the stock we require in our business.

Wallace Pierson, Connecticut:—He is one of the large users of Manetti stock in America for growing roses under glass. Native grown stocks are a failure on account of crown gall and canker. In one propagation of Manetti stocks he had 100 per cent of crown gall.

J. H. Dayton:—Cannot add much to what has already been said. For many years he has been growing nursery stock and has traveled thoroughly through the country visiting nurseries and looking into production and particularly along the lines of material now imported from Europe. A hundred years ago, pioneer nurserymen on Long Island tried to grow the raw material required in the nursery, and later as the march of progress was westward, this effort followed, but we are today in this respect almost where they were at the start. He has planted Mahaleb seeds but could not produce suitable stocks. Western stock three seasons out of five does not ripen. He recalls one block of 350,000 Native grown Mahaleb seedlings in Kansas which had to be plowed up, while 50,000 French seedlings growing immediately along side were in good condition. If foreign nursery stock is to be prohibited the price of nursery stock in the country will have to go up, and fault will be found with somebody. After the war is over, there will be a big demand and people will want these things. Some seedlings are grown in Washington and Oregon, but they can not be produced in sufficient quantities to supply the trade. If the European stock is cut off where are we to get our supplies?

F. R. Pierson:—Had 25,000 Mannetti stocks, Florida grown. The roots were so brittle that they broke off square when he attempted to pot them up. This never occurred in foreign grown stock.

Dr. Galloway:—The Department of Agriculture recognizes that if any conditions are created to interfere with the present conditions, there should also be some constructive work. Such are now under way but are more or less of an experimental nature. There is in preparation a project to replace these imported articles with stock grown in this country, but it all takes time, and in the meanwhile they ask for the co-operation of nurserymen. The Department has no intention of injuring any industry, now, or in the future. The nature and details of the plan now being considered by the department will largely depend upon the conclusions reached from a review of the testimony presented at this meeting.

F. R. Pierson:—It seems unfortunate, at this time, to take what may seem to our allies as an unfriendly act if it should be decided to exclude all nursery stock from Europe. Holland, England and France are so well explored that there seems to be no further chances of getting any injurious insects or diseases from there. He strongly advocates inspection at the source.

Prof. J. G. Sanders:—He believed that he voiced the sentiment of the Horticultural Inspectors. They have two things in mind. Friendly relations between inspectors and nurserymen. Now the Entomologists and the Plant Pathologists stand in the light of physicians to nurserymen. Inspectors at large have done their best work in inspection lines. He wondered if nurserymen and florists realized the danger in affecting every agricultural item. Untold millions have been lost. In the inspection of evergreens, etc., with large balls of earth they frequently find insects which have no relation to the plant, in the ball of which the insect is secreted. The vacuum system of fumigating such plants has been tried without satisfactory results. Numerous insects have been discovered in the balls of earth on imported nursery stock. Another group of plants which cannot be properly inspected are those which come from little known parts. The inspectors are helpless in this respect. He grants that we are short in the production of fruit stocks and that time should be allowed to adjust this matter.

State Forester of Massachusetts:—The Federal Board and the nurserymen should work together, and the government should spend a million dollars if necessary in experimenting. The nurserymen are business men, while the others only work on theory. He believes that all nursery stock can be grown in this country, but the government must conduct the experiments and determine where and how it can be grown economically and commercially successful.

Market Development

I am very much interested in the progress of the Market Development plans because I am and always have been a strong believer in publicity, and because, furthermore, this is a part of the whole scheme I presented before the American Association at Detroit in 1915, at which time the Association was reorganized along business lines; and while as yet the Association has adopted only a part of my recommendations as then made, we are year by year developing the plans then presented and, as before suggested, this particular question of Market Development is a part of the original Detroit plan. If we

than a few thousand dollars placed in the hands of a Committee on Publicity."

Almost three years after the above expression, a few of you live wires have gotten together and worked out your Market Development plans, and this is only another and perhaps better name for publicity. You may count on me in every way it is possible for me to assist in carrying forward this important and comprehensive plan. \$50,000.00 annually expended judiciously for boosting our nursery products will put the nursery interests of America on the map. The nurseryman who does not see the benefits of belonging to such an organized effort for the development of this business is indeed blind.

There are, to be sure, many details of this plan yet to be worked out, but the chief of the problems connected with the question of Market Development is necessary funds. I am sincerely hoping that when the American Association of Nurserymen assemble at Chicago in June that the entire fund will have been subscribed and that these other minor details will be worked out to the good of all concerned. With best wishes,

Yours very truly,

(Signed) J. R. MAYHEW,
Waxahachie, Texas.



J. R. MAYHEW, Waxahachie, Texas
Acting President
American Association of Nurserymen

are reaching this end by a different route, it makes no particular difference, for, after all, we have but one end in view—the upbuilding of the nursery interests of America.

In my address before the Association at Detroit and speaking particularly of publicity, the following is an extract:—"We need money and lots of it for publicity. We have lost and will continue to lose, until provided for, a great opportunity to keep our interests before the world by a properly financed, well organized, campaign for publicity. No money, I take it, that we could spend would be better spent than a liberal allowance to a thoroughly capable committee on publicity. Individual corporations believe their very life depends on keeping themselves favorably before the public, and their publicity campaigns are maintained at large expense. We are led to believe the results are satisfactory, otherwise they would be discontinued, and if such is true in the conduct of the affairs in an individual business, it would unquestionably be true and would accomplish greater good if maintained by a big broad campaign for publicity year by year through the American Association of Nurserymen. No money that we could spend would bring larger returns



J. W. HILL, Des Moines, Iowa
Treasurer
American Association of Nurserymen

We made the subscription we did to the Organization for Market Development for the nursery business from the fact that we think there is practically no limit as to what can be accomplished by such an organization, if intelligently and efficiently conducted and for the further reason that we have for many years considered that the bulk of the advertising that was done by individual firms throughout the country, was of quite as much value to

their competitors as it was to the firm sending out the advertising.

If this job is thoroughly done as indicated above, there would practically no end of good come to the business from this advertising scheme.

It seems to us that it is both, the duty and privilege of every nurseryman to get behind this scheme and push the organization to completion and then elect men to take charge of the fund and see to its disbursement who will be intelligent and far sighted enough to use the funds so gathered, to the best interests of nurserymen in general.

Yours truly,

E. M. SHERMAN, *President*.

The Sherman Nur Co.,

Charles City, Iowa.

1st. We believe in advertising, generally speaking.

2nd. Seeing that other lines that advertise heavily are doing more business than the nurserymen, it made us want to be up and doing.

3rd. Because other lines are co-operating in publicity campaigns with apparent success.

4th. Because there is a real need for our products, as what we have to offer the public tends to make life more worth while.

5th. Because "In unity there is strength," and we believe that all of us working in harmony can do better than to try to undermine the other fellow,—as has been done in the past by many in our line.

6th. Because there can be more trees and plants sold and planted advantageously than all of us can grow. It is under-selling; not over-production.

7th. Because if we can get down to a working basis on this proposition, we will see the great good in co-operation and will work together on other phases of our business to our mutual advantage.

But we do not believe that this little work that has been started will do everything. It will take time, and possibly we will not see any results for a year or two. But let's not pass up this opportunity!

J. VAN LINDLEY NURSERY CO.,

By O. P. Howard, Secretary and Treasurer.

May I have enough space in your June issue to say a word in behalf of the Market Development idea? The word I want to get across to the nurserymen now is to the three hundred and twelve nurserymen who have been thinking this thing over since it was first given publicity but who haven't put their names on the list for any specific subscription. It is my wish to get the ear of those three hundred and twelve men and to tell them to be sure to be present at the Thursday morning session of the Association in Chicago, June 27th, when this matter of Market Development is going to have a special place at the head of the program that day, with ample time for the Committee to place it in full before the Convention. Then the three hundred and twelve will open up and get on the subscription list because this is the biggest thing that has ever come before the nurserymen for the real development of new business.

Yours very truly,

H. B. CHASE.

Chase, Alabama.

I am thoroughly in sympathy with a concerted effort for Market Development. Our experience is that the expenditure of money on publicity this spring is not producing as satisfactory results as in normal times. Therefore I cannot counsel expending any large sum of money for publicity or on a campaign of general market development during the season of 1918-1919, unless conditions change. However, the time should be used to plan such a campaign, and during the same time, to organize the merchandizing methods of the trade on sane lines—classifying the kinds of customers, and determining the proper prices to which each class is entitled.

All that we can hope for in a campaign of publicity is to arouse attention and interest of the public. Unless we are organized to take advantage of this aroused public attention and interest, it will be wasted and the campaign will be a failure. If on the other hand, we figure out a way to follow up the campaign, and materially increase the volume of nursery business of the country, then we have accomplished something in trade development. Mere publicity will not do this as every advertiser knows.

Yours very truly,

ALVIN E. NELSON,

Swain Nelson & Sons Co.,

Chicago, Ill.

I have been asked why I subscribe to the fund for instituting a National Campaign of MARKET DEVELOPMENT. I did this gladly, because it will help all of us. First: It will reach many who are not now buyers or planters and who will be benefited by the wholesome, healthful influence derived by associating themselves more closely with trees, flowering shrubs, hardy flowers, plants and all things that grow. Second: Because it will increase our own business, make the little Tradesman grow bigger, the big ones grow bigger still; and it will also make the little nurseryman as well as the big one, grow to be better plantsmen and better business men. We will be coming out in the open, our products are good goods, destined to add to the comfort and pleasure of every man, woman and child.

Now, I assume, we who are engaged in the production of trees and shrubbery of all kinds, are loyal to our cause, believe in our own goods, have faith in what we preach; then let us all join hands and dollars so that we will effectively start this great and laudable campaign of MARKET DEVELOPMENT, for it is a good thing to plant a tree, a bush or a flower. They mean so much to the lives and happiness of all mankind.

Many nurserymen have cheerfully and liberally subscribed, will you send your subscription now? And will you also ask some other nurserymen to subscribe?

Yours truly, ADOLF MULLER.

List of Subscribers for Market Development Fund

NEW ENGLAND SECTION

NEW HAMPSHIRE

Chase Co., Benj., Derry\$100.00

MASSACHUSETTS

Adams Nursery Co., J. W., Springfield\$100.00

Brandley, James, Walpole 25.00

Breck-Robinson Nursery Co., Lexington 100.00

Breed, E. W., Clinton 25.00

Heurlin, Julius, So. Braintree 50.00

Kelsey, Harlan P., Salem 100.00

Littlefield & Wyman, No. Abington	20.00	Uecker, Robert C., Harvard	10.00
McManmon, J. J., Lowell	25.00	KENTUCKY	
Thurlow's Sons, T. C., West Newbury	100.00	Hillenmeyer & Son, H. F., Lexington	\$ 25.00
Wright, Geo. B., Chelmsford	25.00	INDIANA	
Massachusetts Nurserymen's Association	100.00	Hobbs & Sons, C. M., Bridgeport	\$100.00
Bay State Nurseries, North Abington	100.00	Reed, W. C., Vincennes	50.00
Framingham Nurseries, Framingham	100.00	Simpson & Sons, H. M., Vincennes	20.00
New England Nursery Co., Bedford	25.00	OHIO	
RHODE ISLAND		Baird & Hall Nursery, Troy	\$ 15.00
Clarke, Daniel, Fiskeville	50.00	Storrs & Harrison Co., Painesville	150.00
Vanicek, V. A., Newport	100.00	Kohankie, Martin, Painesville	50.00
CONNECTICUT		WESTERN SECTION	
Burr & Co., C. R., Manchester	250.00	KANSAS	
Elm City Nursery Co., New Haven	100.00	Bernardin, E. P., Parsons	\$ 50.00
Hunt & Co., W. W., Hartford	25.00	Chanute Nurseries, Chanute	10.00
Pierson Corporation, A. N., Cromwell	100.00	Holsinger Brothers, Rosedale	50.00
North-Eastern Forestry Co., Cheshire	30.00	Mount Hope Nurseries, Lawrence	50.00
Connecticut Nurserymen's Association	50.00	Willis & Co., A., Ottawa	50.00
MIDDLE ATLANTIC SECTION		MISSOURI	
PENNSYLVANIA		Peyton, T. R., Boonville	10.00
Andorra Nurseries, Chestnut Hill	\$250.00	Stark Brothers, Louisiana	250.00
Barr, B. F., Lancaster	25.00	Westover Nursery Co., Clayton	50.00
Conard & Jones Co., West Grove	250.00	Weber & Sons Nursery Co., H. J., Nursery	50.00
Farr, B. H., Wyomissing	25.00	IOWA	
Hoopes, Bro. & Thomas Co., West Chester	250.00	Ferris, Earl, Hampton	\$ 25.00
Jones, J. F., Lancaster	10.00	Mount Arbor Nurseries, Shenandoah	250.00
Keystone State Nursery Co., Pittsburgh	25.00	Shenandoah Nurseries, Shenandoah	250.00
McFarland Co., J. Horace, Harrisburg	250.00	Sherman Nursery Co., Charles City	150.00
Meehan Co., Thomas B., Dresher	250.00	Welch, E. S., Shenandoah	250.00
Moon Co., William H., Morrisville	250.00	NEBRASKA	
Muller, Adolf, Norristown	50.00	Backes, H. J., Humphrey	\$ 20.00
National Nurseryman, Hatboro	50.00	Harrison Nursery Co., York	50.00
Pennsylvania Nursery Co., Girard	25.00	Marshall Bros. Co., Arlington	50.00
Rakestraw-Pyle Co., Kennett Square	50.00	Sonderegger Nurseries	50.00
Root, J. W., Manheim	10.00	NORTHWESTERN SECTION	
Stein, Geo. E., Wrightsville	5.00	MINNESOTA	
Thomas & Sons, Jos. W., King-of-Prussia	25.00	Brand Nursery Co., Faribault	\$ 50.00
Wohlert, A. E., Narberth	25.00	Clinton Falls Nursery Co., Owatonna	150.00
MARYLAND		Deerfield Nursery Co., Medford	—*
Harrison & Sons, J. G., Berlin	\$500.00	Howard Lake and Victor N. Co., Howard Lake	—*
DELAWARE		Jewell Nursery Co., Lake City	150.00
Bunting's Nurseries, Selbyville	\$ 10.00	Pfaender, William, New Ulm	—*
NEW JERSEY		Rose Hill Nursery Co., Minneapolis	50.00
Barrett & Son, Benj., Blue Anchor	\$ 5.00	Tolleson Nursery Co., Lake City	25.00
Bobbink & Atkins, Rutherford	250.00	Wedge Nursery Co., Albert Lea	150.00
F. & F. Nurseries, Springfield	250.00	NORTH DAKOTA	
Lovett, J. T., Little Silver	100.00	Hankinson Nursery Co., Hankinson	\$ 50.00
McColgan Nurseries, Red Bank	10.00	Northwest Nursery Co., Valley City	50.00
Momm's Sons Co., C., Irvington	10.00	SOUTH DAKOTA	
Plainfield Nurseries, Scotch Plains	25.00	Will & Company, Oscar H., Bismarck	\$ 25.00
Princeton Nurseries, Princeton	250.00	SASK., CANADA	
Roehrs Co., Julius, Rutherford	100.00	Prairie Nursery Co., Estevan	100.00
Horner, Harold, Mt. Holly	10.00	SOUTH-EASTERN SECTION	
NEW YORK		MISSISSIPPI	
American Nurseryman, Rochester	10.00	U. S. Nursery Co., Roseacres	\$100.00
Dansville Wholesale Nurserymen, Dansville	50.00	TENNESSEE	
Harris, S. G., Tarrytown	50.00	Cumberland Nurseries, Winchester	\$ —*
Hicks & Son, Isaac, Westbury	250.00	NORTH CAROLINA	
Jackson & Perkins Co., Newark	250.00	Lindley Nursery Co., J. Van, Pomona	\$250.00
McHutchison & Co., New York	500.00	ALABAMA	
Maloney Bros. & Wells Co., Dansville	50.00	Chase Nursery Co., Chase	\$250.00
Smith Co., W. & T., Geneva	250.00	Kelley & Sons, J. O., Jeff	10.00
Swan River Nurseries, Patchogue	35.00	SOUTH-WESTERN SECTION	
Williams, Miss Rose, Newark	10.00	TEXAS	
Doubleday, Page & Co., Garden City	250.00	Baker Bros. Co., Fort Worth	\$ 25.00
CENTRAL SECTION		Texas Nursery Co., Sherman	250.00
MICHIGAN		Waxahachie Nursery Co., Waxahachie	100.00
Hlgenfritz' Sons Co., I. E., Monroe	\$250.00	OKLAHOMA	
ILLINOIS		Parker, Jim, Tecumseh	\$ 10.00
Augustine & Co., Normal	\$ 25.00	PACIFIC COAST	
Aurora Nursery Co., Aurora	50.00	CALIFORNIA	
Beaudry Nursery Co., W. E., Chicago	25.00	Fancher Creek Nurseries, Fresno	\$ 50.00
Bryant & Son, A., Princeton	50.00	OREGON	
Corn Belt N. & F. Association, Bloomington	50.00	Pilkington, J. B., Portland	\$ 50.00
Hill Nursery Co., D., Dundee	100.00	*Asked to be enrolled, amount of subscription to be announced later.	
Ingels, Irvin, Lafayette	25.00		
Klehm's Nurseries, Arlington Heights	50.00		
Leesley Brothers, Chicago	50.00		
Naperville Nurseries, Naperville	50.00		
Saddler Brothers, Bloomington	50.00		
Nelson & Sons Co., Swain, Chicago	50.00		

THE OPPORTUNITY OF THE HOUR



NO greater opportunity has ever faced American nurserymen than confronts them to-day.

It is true that it costs more to grow a tree than it did a few years ago; it is true that labor is not as plentiful as it was before an army was needed to hunt the Hun.

But, thank God, it is also true that the American people have their homes undefiled; their fields of grain growing under the spring sun; their fruit trees blooming with the promises of future crops; their cattle grazing on a thousand hills.

The potential purchasers of the trees growing in your nursery are these same prosperous American people. The market development plan will put every nurseryman into closer relationship with these people, whether dwellers in the small town where a score of trees fill the allotted place, or farmers who can give acres to fruit crops.

Your moral and financial support is needed if American nurserymen are to grasp what is in reach of their hands.

FOR SALE

FOR SALE:—Nursery with over forty acres of choice ornamental nursery stock including large collection of evergreens, shrubs, and perennials. This nursery is doing a high class business and has a good rating. Its annual business and acreage have both almost doubled in four years, the expansion being made from profits of the business. Location is good and friends are many. **Past year's business largest on record.** Reason for selling; war service. Will sell controlling interest or might sell less to experienced manager without sufficient capital. "BOX W," Care of N. N.

WE WANT TO BUY RAFFIA

in any quantity. Spot cash paid.
Mail sample and price stating quantity to

McHUTCHISON & CO.
95 Chambers Street, New York

The *Established 1841*
Gardeners' Chronicle
is the Leading Horticultural Journal in the World

*SUBSCRIPTION IN U. S. A., \$4.20
YEARLY POST FREE*

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HORTICULTURE

A Magazine of Trade News and Cultural Information for the NURSEYMAN, FLORIST, SEEDSMAN and GARDENER. A reliable exponent of advanced Trade and Progressive Horticulture.

Published Weekly

SUBSCRIPTION \$1.00 PER YEAR
HORTICULTURE PUBLISHING CO.
147 Summer St. Boston, Mass.

-- FRUIT STOCKS --

ROSES in the best and latest sorts, and other General NURSERY STOCKS imported to order from France, England and Ireland for fall delivery; we attend to import licenses if ordered timely.

AUGUST ROLKER & SONS
51 Barclay Street, - - NEW YORK CITY.

Seeds For Nurserymen

Apple, French, Japan and Kieffer Pear, Myrobolan Plum and Quince Seeds. Also Tree, Shrub and Evergreen Seeds in a large assortment. My Catalogue contains complete list with Prices. Send for a copy.

THOMAS J. LANE
SEEDSMAN
DRESHER, - Penna., U. S. A.

Under the present conditions we find the mail is often delayed and we ask our patrons to please send advertising matter promptly to our office at Hatboro, Pa.

AMERICAN FLORIST'S TRADE DIRECTORY
Price \$3.00, Postpaid
For Sale By
NATIONAL NURSERYMAN PUB. CO. Inc.,
HATBORO, - - - PA.

Charles Detriche, Senior ANGERS, FRANCE

Grower and Exporter of Fruit-Tree Stocks, Forest Tree Seedlings, Rose Stocks, Shrubs, Vines, and Conifers for Nursery Planting.

For all information as to Stocks, prices, terms, etc., address

Jackson & Perkins Co.
(SOLE AGENTS)
NEWARK, N. Y.

ESTABLISHED 1893

THE NATIONAL NURSERYMAN

INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock. Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed. Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all leading nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock offered for sale.

SUBSCRIPTION PRICE \$1.50 per year in advance. FOREIGN SUBSCRIPTIONS \$2.00 per year in advance.

Advertising Rates on Application

THE NATIONAL NURSERYMAN PUBLISHING COMPANY Incorporated

Subscribers to "Nurserymen's Fund for Market Development."

Hatboro, Penna.

When writing to Advertisers please mention the National Nurseryman.

Bobbink & Atkins

Nurserymen and Florists

RUTHERFORD, NEW JERSEY

Palms and General Decorative Plants, INSPECT
Conifers, Shade and Ornamental Trees INVITED

ASK FOR WHOLESALE CATALOGUE

(Subscribers to "Nurserymen's Fund for Market Development.")

THE HORTICULTURAL CATALOG

A Monthly Trade Publication for
Western Nurserymen, Florists, Seedsmen, Etc.

Contents alphabetical listings of available surplus stock, etc.
Sample Copy 15c \$1.00 per year. Foreign \$1.50
THE HORTICULTURAL CATALOG, Los Angeles, California

A Large Stock of
**Apple, Pear, Cherry and Peach
Grape Vines, Blackberry and
Raspberry Plants**

And a general line of ORNAMENTAL TREES
and SHRUBS. All stock clean and thrifty, the
best that can be grown.

T. B. WEST, Perry, Ohio.

Fruit Trees, Roses, Manetti Stocks
in heavy quantities

JOHN WATSON, Nurseryman,
Newark, New York

Is our sole agent for United States and Canada

S. SPOONER & SONS,
The Nurseries - - Hounslow,
Est. 1820 England

W. T. HOOD & CO.
OLD DOMINION NURSERIES

RICHMOND - - - VIRGINIA

We offer for Fall 1917 and Spring 1918, general line of
Nursery Stock—California and Amoor River Privet, Norway
Maples, Oriental Planes, Evergreens, etc.

We will have a heavy stock of Peach Trees and Norway
Spruces on which we can quote attractive prices

We expect to be in position to offer Natural Peach Seed,
crop of 1917. Send us your list for quotations.

SCARFF'S NURSERY

Headquarters for

Small Fruit Plants

1200 Acres "At it 25 Years"

Strawberries	Currants	Rhubarb
Raspberries	Gooseberries	Asparagus
Blackberries	Grape Vines	Horseradish
Dewberries	Privet	Hardwood Cuttings
Berberry	Spirea	Butterfly Bush

100,000 transplanted Raspberry, Blackberry and Dewberry plants
for retail trade. See wholesale list before placing your order.

W. N. SCARFF & SONS
NEW CARLISLE OHIO

W. FROMOW & SONS

Azalea mollis, Rustica and Ghent in all the leading varieties,
grown from layers not grafted.

Manetti Stocks clean and well rooted for grafting or open
ground.

Standard, Climbing, Weeping and Dwarf Roses in great variety
Rhododendrons, the cream of the Hardy American varieties.

Andromeda floribunda, japonica, and speciosa, bushy budded
plants.

Kalmia latifolia.

Green and River's Purple Beech in all sizes up to 12 feet.

Prices and full particulars on application.

WINDLESHAM NURSERIES

Surrey, - - - England.

Portland Wholesale Nursery Co.

122 1/2 Grand Avenue, Portland, Oregon

General Nursery Stock and Nursery Supplies

APPLE, one year, large assortment.
PEAR, one and two year, mostly Bartlett.
CHERRY, one and two year, general assortment.
PRUNE, one year, mostly Italian and French.
GOOSEBERRY, one and two year, Oregon Champion.
SHADE TREES in assortment.
ROSES, field grown, large assortment.

Our Trade List is now ready; a postal card will bring it.

ALL "AMERICAN NURSERYMEN"

Wishing to do business with Europe should send for the

"Horticultural Advertiser"

This is The British Trade Paper being read weekly by
all Horticultural traders. It is also taken by over 1000 of
the best Continental houses. Annual subscriptions to cover
cost of postage, \$1.00. Money orders payable at Lowd-
ham, Notts. As the H. A. is a purely trade medium appli-
cants should, with the subscription, send a copy of their
catalogue or other evidence that they belong to the nursery
or seed trades. Address

**Editors of the "H. A." LOWDHAM, NOTTS,
ENGLAND**

TREES

Largest assortment in New Eng-
land. Evergreens, deciduous trees,
both common and rarer varieties.
Sturdy, choice stock that can be
depended upon. Send for catalog
and special trade prices.

The Bay State Nurseries

North Abington
Mass.

SHRUBS

This New England soil and cli-
mate produce fine sturdy shrubs.
Special trade prices. By the thous-
ands, hardy Native and Hybrid Rho-
dodendrons—transplanted and accli-
mated. Send your lists let us est.

When writing to Advertisers please mention the National Nurseryman.

COMPLETE SELLING SERVICE FOR SEEDSMEN AND NURSEYMEN

CATALOGS AD-WRITING FOLLOW-UPS, ETC.

SERVICE that is positively necessary to you
under present conditions. : :

SERVICE that will increase your business and
decrease the cost of getting it.

SERVICE that *has proven* its worth to Seedmen
and Nurserymen throughout the U. S.

That is—

GARRABRANT SERVICE

CATALOGS I will write, plan and furnish all illustrations for your catalog, relieving you of all detail and assuring you of a catalog efficient as an "order getter."

AD-WRITING I will write and place your advertising giving you copy that will "pull."

FOLLOW-UPS I will write, plan and furnish Follow-up letters and circulars that will get results.

This complete service is offered you at a cost much less than its worth and I shall be glad to submit you a proposition on your Fall 1918 and Spring 1919 campaigns if you will write me today.

*Do It Now---*Prices of labor and materials are going up.

W. A. GARRABRANT

Horticultural Publicity Service

AMERICAN BANK BLDG. KANSAS CITY, MO.

AN APPEAL TO THE AMERICAN NURSERYMEN



The American Association of Nurserymen has a committee, the Subscribers Organization of Nurserymen for Market Development. The aim of this committee is to raise a fund of \$50,000 a year for five years for the purpose of creating a larger demand for nursery stock of all kinds.

The purpose of this committee is a great work and worthy of the support, financially and otherwise, of every Nurseryman and those in allied businesses in the U. S.

It has occurred to me that practically every Nurseryman is overlooking an opportunity to CREATE business in the production of his catalog.

Most nursery catalogs are nothing more than a price list. There is no suggestion of creating new business in the catalogs. What to plant, when to plant, where to plant--IDEAS. Most other businesses live on ideas--why not the Nurseryman? Put them in your catalog--you will be creating a market.

Sell service, and get a fair price for your stock.

By putting the ideas of this committee into your catalog you will be helping to bring about conditions in the nursery business that this committee is trying to work out.

I will be glad to offer suggestions to nurserymen, regardless of whether or not you are interested in my catalog or advertising service, and solicit an inquiry from you.

Let's get action--"Go Over the Top"--to the best interests of the Nursery business, and remember that the combined power of all American nursery catalogs is a wonderful power, or could be made to be, as one or more of them reaches nearly every man, woman and child in the U. S.


Think it over and let me hear from you.

For service,

A handwritten signature in red ink that reads "W. G. Garabrant". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Horticultural Publicity Service

American Bank Bldg.,
Kansas City, Mo.



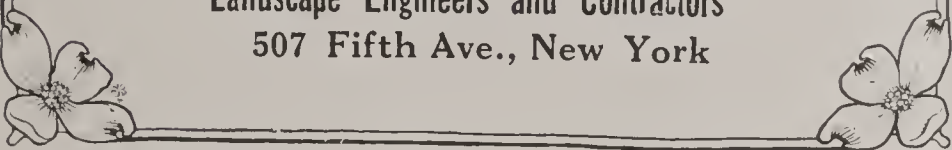
Nurserymen Who Are Prepared Secure Profitable Contracts

Frequently you might secure contracts for park, cemetery or country estate developments if you could execute the entire work. Our organization will co-operate with you, supplying all factors for securing such contracts, and making much larger sales of your own nursery stock. The service we offer includes

Grading and Road Construction
Pools—Walks—Gardens
Large Tree Moving and Planting

Contracts for spring work should be arranged for at once. We will go anywhere east of the Mississippi River. A wire or letter will place us in touch with you immediately. Write us for details of our methods and policy, and list of references.

"Constructors of Landscapes"
HYLAND-JENCKS
Landscape Engineers and Contractors
507 Fifth Ave., New York



NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER—We offer all or any part of an accumulation of long Nursery Bands one inch in width and sixty inches to one hundred and twenty inches in length, at a reduction of twenty dollars a ton. This offer holds good until stock is disposed of.

WRITE US

COVERING YOUR WANTS IN STEEL BANDS

American Steel Band Co.,

888 Progress Street, ALLEGHENY, PA.

THE CHASE LABELS

For Nurserymen and Florists are Excelled by None
Plain, Painted, Wired with Tinned or Copper Wire and
PRINTED IN ANY MANNER that may be called for
Prices as low as First-Class Work and Unequalled Promptness in Delivery will justify.

THE BENJAMIN CHASE CO.
P. O. Address, DERRY VILLAGE, N. H.
Western Union Telegraph, DERRY, N. H.
Subscribers to "Nurserymen's Fund for Market Development."

"BUDTIE"

What is it?

There will be no Raffia for sale this year. Government requisitioned all of it for war purposes.

What will you do for budding this year?

USE "BUDTIE" OF COURSE

Write us for samples and prices at once.

THOMAS B. MEEHAN CO.
Introducers of "Budtie"
DRESHER, PENNA.
Subscribers to "Nurserymen's Fund for Market Development."

North Carolina Natural Peach Pits

Further investigation leads us to the opinion that there will be, perhaps, half a crop of 1918 seed. At this time we have on hand some 1917 seed, which can be shipped promptly, or as soon as the Railway Company can accept same. We find that the Railway people will handle shipments to some sections, and not to others. This morning we have a letter advising us to let a shipment to Rochester, N. Y., go ahead, but holding up a shipment to a nearer by point.

We still advise that orders be placed for whatever seeds that are wanted, and let them move at the earliest possible date, if you want to plant this fall.

Prices supplied and inquiries answered promptly.

J. VanLINDLEY NURSERY CO.
Pomona, N. C.
Subscribers to "Nurserymen's Fund for Market Development."

Bamboo Cane Stakes

Natural	6 ft.,	2000 per bale
"	9-12 ft.,	400 "
"	6- 9 ft.,	600 "

Write for prices

McHutchison & Co., 95 Chambers St., N. Y.

When writing to Advertisers please mention the National Nurseryman.



Orlando Harrison



Geo. A. Harrison



G. Hale Harrison



Henry L. Harrison

These four men will represent Harrison's Nurseries at the Convention, June 26, 27, 28. They will be glad to tell you about the methods employed in producing Harrison-grown trees; to prove to you that you can safely offer Harrison-grown trees to your most exacting customers; and to take your order for stock to be shipped this fall or in the spring of 1919.

Harrison-Grown Fruit Trees

TWO-YEAR APPLES, BUDDED

200 Alexander	200 July	500 Tompkins
500 Baldwin	5,000 McIntosh	King
500 Ben Davis	400 Nero	500 Wagner
200 Bullock	2,000 Northern Spy	3,000 Williams
2,000 Fameuse	2,000 Rhode Island	Early Red
500 Gano	500 Smokehouse	2,000 Winter
1,000 Gravenstein	2,000 Star	300 Wolf River

ONE-YEAR APPLES, BUDDED

Alexander	King David	Spitzenburg
Bonum	Lowry	Sweet Bough
Bullock	Liveland Raspberry	Stark
Ben Davis	Maiden Blush	Summer Rambo
Baldwin	McIntosh	Starr
Delicious	Nero	Smokehouse
Early Ripe	Northern Spy	Stayman
Early Harvest	Northwestern	Tompkins King
Fourth of July	Greening	Winter Rambo
Fallawater	Chenango	Wagener
Fameuse	Opalescent	Wolf River
Gravenstein	Oldenburg	Winter Banana
Grimes Golden	Paragon	Wealthy [Red]
Gano	Rhode Island	Williams Early
Horse	Greening	Winesap
Hubbardston	Red Astrachan	Yellow Newtown
Hyslop	Rome Beauty	Yellow Transparent
Jonathan	Red June	York Imperial
		Transcendent Crab

ONE-YEAR PEACHES, BUDDED

Alexander	Frances	Mountain Rose
Belle of Georgia	Ford's Late White	Mayflower
Admiral Dewey	Fox Seedling	Matthews Beauty
Beer Smock	Fitzgerald	Mamie Ross
Bilveu's Late	Foster	Niagara
Brackett	Greensboro	New Prolific
Carman	Geary's Hold-On	Oldmixon Free
Champion	Hiley	Ray
Crawford's Late	J. H. Hale	Ringold
Chair's Choice	Iron Mountain	Red Bird Cling
Connett's Southern	Krummel	Slappey
Early	Kalanazoo	Salway
Captain Ede	Lorentz	Stump
Elberta	Lemon Free	Stevens' Rareripe
Early Rose	Late Elberta	Uneeda
Early Elberta	Levy's Late	White Heath Cling
Engle's Mammoth	Moore's Favorite	Wonderful
Early Crawford	Miss Lola	Yellow St. John
Edgemont Beauty		

Hedge Plants

California Privet	Boxwood (Dwarf)	Boxwood (Glo- ular)
25,000 12 to 18 in.	200 12 in.	200 12 to 18 in.
25,000 18 to 24 in.	100 18 in.	100 24 in.
35,000 2 to 3 ft.	Boxwood (Pyra- midal)	Barberry, Thun- berg's
25,000 3 to 4 ft.	500 18 in.	20,000 6 to 12 in.
500 4 to 5 ft.	500 24 in.	20,000 12 to 18 in.
Specimens	500 30 in.	10,000 18 to 24 in.
2,000 3 ft. high, 3 ft. broad.	100 36 in.	5,000 2 to 3 ft.
		1,000 2½ to 3 ft.

Harrison's Nurseries
J.G. HARRISON & SONS PROPRIETORS
BERLIN MARYLAND

Deciduous Trees

Beech, Purple (Fagus sylvatica)	Maple, Schwedler's
500 3 to 4 ft.	50 10-12 ft., 1½ in.
250 4 to 5 ft.	50 12-14 ft., 1¾ in.
Elm, American	100 14-16 ft., 2-2½ in.
1,000 7-8 ft.	30 14-16 ft., 3 in.
1,000 8-10 ft., 1¾ in.	Oak, Black
Linden, American	25 10-12 ft., 1½ in.
50 8-10 ft., 1¾ in.	25 12-14 ft., 1¾ in.
100 10-12 ft., 1½ in.	25 14-16 ft., 2-2½ in.
100 12-14 ft., 1¾ in.	25 14-16 ft., 3 in.
100 14-16 ft., 2 in.	Oak, Bur or Mossy Cup
Maple, Sugar	25 10-12 ft., 1½ in.
200 7-8 ft., 1 in.	25 12-14 ft., 1¾ in.
1,000 8-10 ft., 1-1½ in.	25 14-16 ft., 2½ in.
1,500 10-12 ft., 1½-1¾ in.	25 14-16 ft., 3 in.
500 12-14 ft., 1¾-2 in.	Oak, Red
500 14-16 ft., 2-2½ in.	50 10-12 ft., 1½ in.
25 3 in.	50 12-14 ft., 1¾ in.
Maple, Norway	50 14-15 ft., 2 in.
5,000 7-8 ft., 1 in.	50 15-16 ft., 3 in.
10,000 8-10 ft., 1¼-1½ in.	Plane, Oriental
15,000 10-12 ft., 1½-1¾ in.	2,000 6-7 ft.
15,000 12-14 ft., 1¾-2 in.	1,000 7-8 ft.
10,000 14-16 ft., 2-2½ in.	1,000 8-10 ft., 1¼ in.
10,000 2½-3 in.	1,000 10-12 ft., 1½ in.
5,000 3-3½ in.	1,000 12-14 ft., 1¾ in.
3,000 3½-4 in.	1,000 12-14 ft., 2 in.
1,300 4 in.	1,000 14-16 ft., 2½ in.

Evergreens in Quantity

Arborvitae, American	30 4 -4½ ft.
1,000 2½-3 ft.	30 4½-5 ft.
1,000 3 -3½ ft.	Fir, Cephalonian, con.
1,000 3½-4 ft.	30 5 -5½ ft.
1,500 4 -4½ ft.	20 5½-6 ft.
1,500 4½-5 ft.	10 6 -7 ft.
1,100 5 -5½ ft.	10 7 -8 ft.
500 5½-6 ft.	Fir, Nordmann's
Arborvitae (Biota ori- entalis)	50 1 -1½ ft.
500 2 -2½ ft.	50 1½-2 ft.
100 2½-3 ft.	10 2 -2½ ft.
100 3 -3½ ft.	10 2½-3 ft.
Cedar, Red (Trans- planted)	Hemlock, Canadian.
100 2-2½ ft.	Well formed Spec- imens.
Cedar, Blue Virginia	100 1 -1½ ft.
100 2-2½ ft.	1,000 1½-2 ft.
100 2½-3 ft.	1,000 2 -2½ ft.
100 3-3½ ft.	300 2½-3 ft.
Fir, Cephalonian	200 3 -3½ ft.
25 2 -2½ ft.	200 3½-4 ft.
25 2½-3 ft.	150 4 -4½ ft.
25 3 -3½ ft.	150 4½-5 ft.
25 3½-4 ft.	150 5 -6 ft.

Pines, Austrian

50 3 -3½ ft.
50 3½-4 ft.
50 4 -4½ ft.
10 4½-5 ft.
10 5 -5½ ft.
10 5½-6 ft.
10 6 -7 ft.

Retinospora, Japanese Plume-like

200 2 -2½ ft.
100 2½-3 ft.

Retinospora, Japanese Golden Plume-like

100 2-2½ ft.

Retinospora, Veitch's Japanese

100 2-2½ ft.

Spruce, Douglas

100 2-2½ ft.

Spruce, Colorado Blue. Selected Blues—

compact.

50 2 -2½ ft.

75 2½-3 ft.

100 3 -3½ ft.

100 3½-4 ft.

100 4 -4½ ft.

100 4½-5 ft.

175 5 -5½ ft.

Spruce, Colorado Green

50 2 -2½ ft.

100 2½-3 ft.

100 3 -3½ ft.

100 3½-4 ft.

190 4 -4½ ft.

180 4½-5 ft.

60 5 -5½ ft.

50 6 -7 ft.

Spruce, Koster's Blue. Specimens

100 1½-2 ft.

100 2 -2½ ft.

100 2½-3 ft.

100 3 -3½ ft.

100 3½-4 ft.

100 4 -4½ ft.

100 4½-5 ft.

100 5 -5½ ft.

100 5½-6 ft.

25 6 -7 ft.

25 7 -8 ft.

Spruce, Norway

1,000 2½-3 ft.

2,000 3 -3½ ft.

2,000 3½-4 ft.

1,500 4 -4½ ft.

1,500 4½-5 ft.

1,000 5 -6 ft.

1,500 6 ft.

1,300 7 ft.

1,100 8 ft.

1,100 10 ft.

Spruce, White

25 7-8 ft.

10 8-10 ft.

Subscribers to "Nurserymen's Fund for Market Development."



THE NATIONAL NURSERYMAN



JULY 1918

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of

*Peach, Gooseberries,
Currants, Berberis,
Spirea Van Houtte,
Other Ornamental Shrubs,
H. P. Roses, Etc.*

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.

Monroe, Mich.

Subscribers to "Nurserymen's Fund for Market Development."

MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

Shenandoah, Iowa



Our Specialty

A large and complete line of high quality Nursery Stock for the wholesale trade.

We still have a good assortment of FRUIT TREES, SMALL FRUITS, SHADE and ORNAMENTAL TREES, SHRUBS, ROSES and VINES.

With our superior storage facilities we are able to furnish a good assortment of stock for shipment until the middle of May.

ASK FOR TRADE LIST AND BULLETINS.

We are subscribers to the NURSERYMEN'S FUND FOR MARKET DEVELOPMENT, a co-operative national campaign to create new business. Ask about it.

*Progressive, Superb
and Peerless
...Everbearing...
Strawberry Plants*

We can supply you fresh dug every day. Healthy true-to-name, well rooted at attractive prices.

Address

The W. F. Allen Company
Salisbury, Maryland

"RIGHT now H. P. Roses, Climbing Roses, Apples, Peaches, are very scarce. Write us for prices. Remember that we have acres of Ornamentals, carloads of Barberry Thunbergii and California Privet. Pleased to hear from you."



C. R. BURR & CO.

Manchester, Conn.

Subscribers to "Nurserymen's Fund for Market Development."

The
Preferred
Stock

The
Preferred
Stock

There Are Compensations TO THE NURSERY BUSINESS



One of them is to go over the nurseries in such a favorable growing time as we are having just now and see how well the stock is coming along. It helps us to forget the vacant spots which represent Jack Frost's depredations, the freight embargoes of last shipping season and the numerous anxieties and uncertainties of the past year. It fills us with hope and optimism for the future and assures us of being able to furnish stock of the usual high J. & P. quality for the coming season.

We expect to have good supplies of our usual specialties, such as Roses, Clematis, Tree Hydrangeas, Ampelopsis, also a full line of Perennials, Shrubs, Shade and Fruit Trees. Mail inquiries and, where possible, personal inspection of our stock, are solicited.



Jackson & Perkins Company
NEWARK - - NEW YORK

Subscribers to "Nurserymen's Fund for Market Development."

The
Preferred
Stock

The
Preferred
Stock

"TOO RADICAL?"

Some say our plan of cooperating with our customers—and with those who are not yet our customers—is too radical; that we can't apply to the Nursery business the standards of other lines because the nursery business is "different."

No other line with the same absence of cooperation between wholesaler and retailer, could survive very long. Aren't we nurserymen wondering right now how long we can survive under present conditions? It is not "knocking" nor failing to "play the game" when we insist that the success of our business and of every business, depends upon the healthy and profitable condition of the means of distribution. If our plan is faulty, it can be corrected by our retail friends; if it is sound, it can succeed for us and others only through receiving such support as it deserves. It is, in short:

To spare neither work nor money to produce the very best quality we can grow of the things we know how to grow; service that is the fruit of experience; prices profitable alike to us and to those who buy our products; the distributing Nurserymen as our only outlet.

Prices alone mean nothing; business is an exchange of values and a blind man can see that better values and higher standards are going to be demanded by those who sell nursery stock and by those who plant it.

We want to hear from firms that have a similar hunch, because we have 200 acres of good stock, grown for the nursery trade.

Princeton Nurseries at Princeton, in New Jersey

Growers Exclusively for Distributing Nurserymen.

July first.

FRAMINGHAM QUALITY NURSERY STOCK

for

YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Now is the time to prepare for Fall business. Make us a visit during your vacation, inspect our stock and reserve what you require for Fall shipment.



Hill's Evergreens

You can work up a good profitable trade in Evergreens if you have the right kind of stock. Our main specialty for over half a century has been the propagation of young Evergreen stock for the wholesale trade in immense quantities at low prices.

We have all the leading varieties in small sizes, for all purposes, suitable for lining out to grow on for your trade.

Nurserymen who have heretofore depended on Europe for their young Evergreen plants can now be assured of a good reliable source of supply right here in America, and we solicit the opportunity of quoting on your requirements.

"Made in U. S. A." and "American Stock for American Planters" should, from now on, more than ever, be the slogan of American Nurserymen for it means "money saved in the long run" to start with nice, strong, sturdy, vigorous American-grown stock which has been produced right here in America.



YOU want to keep posted on Evergreens;

WE want to become better acquainted with you;

Let's get together.

The D. HILL Nursery Co., Inc. Evergreen Specialists

LARGEST GROWERS IN AMERICA

Box 401

Dundee, Ill.

WE are planting with a view to continuing our usual production of nursery stock in the normal quantity and establishing high quality. We feel sure of our ability to show many blocks of interest and profitable consideration to buyers and every branch of the nursery business.

THE STORRS & HARRISON CO.

NURSEYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

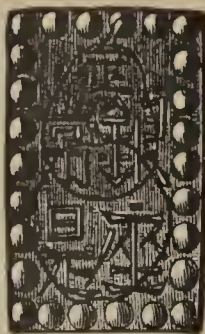
Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa

Subscribers to "Nurserymen's Fund for Market Development."

Heikes—Huntsville—Trees



Established 1872

1500 Acres

FRUIT TREES ROSES and other ORNAMENTALS

For the wholesale trade.
All of our own growing.

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

For Fall of 1918

Ornamentals, Shade Trees, Evergreens,
Perennials, Fruits, etc.

A large stock of the following:

Cherry Trees, 2 yr.
Apple Trees, 2 and 3 yr.
Peach Trees, 1 yr.
Norway Maple up to 2 inch.
Am. Elm, all sizes.

Write for special prices on car lots.

C. M. Hobbs & Sons
Bridgeport, - Indiana

Subscribers to "Nurserymen's Fund for Market Development."

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of Own Root Roses

ORNAMENTAL TREES SHRUBS

BERRIES CLEMATIS

EVERGREENS PEONIES PHLOX

and

HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY
GENEVA, N. Y.

70 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE



THE
North-Eastern Forestry Co.
CHESHIRE
...Connecticut...

We are now ready to quote lowest prices on
**FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS**

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities. Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries
Sparta, Ky.

For FUMIGATION With
HYDROCYANIC ACID GAS
"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by
The Roessler & Hasslacher Chemical Co.
100 William St. - - New York, N. Y.

A Pruning Book That Will Build Business for You



Here is a book that will help you by helping your customers.

It is a practical guide to right pruning and growing. It will tell every purchaser of your products how, when and where to prune for the most vigorous and healthy growth.

Knowing the kind of shears to get is equally as important as knowing how to use them. This book will give your customers some helpful information about shears too.

We'll Send You a Copy Free

We have a plan of co-operative selling and advertising of which "The Little Pruning Book" is an important part. It's a plan that will help you sell Nursery Stock and help us sell Pexto Pruning Shears.

You must see the book before you can appreciate the plan. It sells in book-stores for 50 cts., and believe us "It's worth sending for." Furthermore, sending for it does not obligate you in the slightest. It just gives us an opportunity to tell you about our business building plan.

Send for your free copy today.

The Peck, Stow & Wilcox Co.

2189 W. Third Street

Cleveland, Ohio



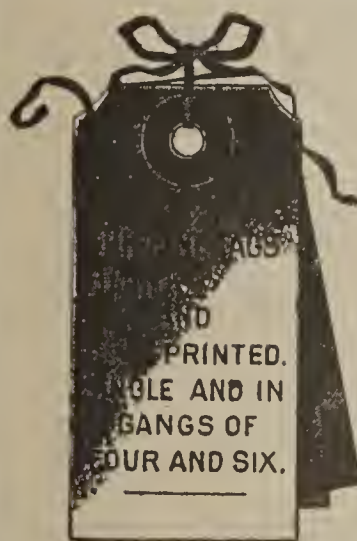
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HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

**Rawhide Brand of Shipping
Tags and Tree Labels**

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.
West Chester, Pennsylvania

For Spring 1918

We offer a Complete
List of

Shade Trees, Shrubs, Evergreens

WILL BE PLEASED TO
SUBMIT PRICES

AUDUBON Nursery, P.O. Box 731, Wilmington, N. C.

P. OUWERKERK,

No. 216 Jane St., Weehawken Heights, Hoboken, N. J.
Rhododendrons, Clematis, H. P. Roses, Hardy Azaleas,
Paeonies, Magnolias, Box Trees, Fancy Conifers, Hydran-
geas and Shrubs, our specialties at our HOLLAND NUR-
SERIES. Some of the goods on hand here during the
packing season.

TREE SEED

Large assortment of Tree, Shrub and Fruit
Seeds for ornamental and forestry purposes.
Send for catalogue. **CONYERS B. FLEU, Jr.**
Germantown, Philadelphia, Pa.

AMERICAN FLORIST'S TRADE DIRECTORY

Price \$3.00, Postpaid

For Sale By

NATIONAL NURSEYMAN PUB. CO. Inc.,
HATBORO, - - - PA.

Seeds For Nurserymen

Apple, French, Japan and Kieffer Pear, Myrobalan Plum and
Quince Seeds. Also Tree, Shrub and Evergreen Seeds in a
large assortment. My Catalogue contains complete list with
Prices. Send for a copy.

THOMAS J. LANE
SEEDSMAN

DRESHER,

Penna., U. S. A.

WE OFFER

Grape Vines, Currants and Gooseberries
in all varieties and grades, also
Grape and Currant Cuttings and Light Grade of Vines for
Lining Out in Nursery Rows
WRITE FOR PRICES

F. E. Schifferli, - Fredonia, N. Y.



Unusual and rare stock in great varie-
ty; hardy Bamboos, Palms, Crapemyr-
tles, fruit and Economic trees and
plants, etc., etc., from all over the world.

New additions constantly being tested.
Ask for complete descriptive catalog, and
wholesale rates. 34th year.

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ONCO - FLORIDA.

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Catalogues
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Publishing Co.
Hatboro, Pa.

Specialists in Nursery Printing
Ask for Prices. We are the printers of this Magazine



Field-grown own-root

Roses Shipments Jan. 1st
to March 15th

Howard Rose Co., Hemet, Cal.

PEONIES: Profitable cut-flower and best general plant-
ing varieties. Very early, early, mid-season, late. Any quan-
tity. Own growing. Early September shipment. Submit
list.

HARMEL PEONY COMPANY,

Berlin

Maryland

THE WESTMINSTER NURSERY

J. E. Stoner, Prop.

WESTMINSTER

MARYLAND

Offers for Fall, 1918:

10,000 Monacacy Apple, 2 yr., Buds.
250,000 Cal. Privets, 2 yr. and 3 yr.
500,000 Asparagus Asst., 2 and 3 yr.
Barberry Thun., 3 yr., extra fine.
Lombardy Poplars, 8 to 16 feet.
Oriental Planes, 8 to 16 feet.
Tulip Poplars, 6 to 12 feet.
Horse Chestnuts, 8 to 12 feet.
Catalpa Speciosa, 8 to 12 feet.
Can supply the above in CAR lots.

We also offer in large lots, Rhubarb, Cumb. Raspberry,
Ruby, Miller, and St. Riggs Raspberry Altheas, 3 to 5 feet,
Deutzias, and Spireas Asst., Hydrangeas P. G. Etc. Will
make low prices for early orders.

FAIRFIELD NURSERIES

FRUIT AND SEED FARMS

OFFER for Spring 1918

GRAPE VINES—One and two years old. Varieties
largely Moore's Early, Concord and Niagara.

Also Scarlet or Crimson Clover Seed and Cow Peas.
Free from weed seeds, all recleaned and guaranteed first
class.

Correspondence solicited. Price list upon request.

CHAS. M. PETERS

P. O. Address, Salisbury, Wicomico County, Md., R. F. D. 3

Long Distance Phone and Telegraph, Salisbury, Md.

EVERBEARING STRAWBERRY PLANTS

If you need Everbearing strawberry plants to fill spring
orders or if you wish to increase your planting in nurseries,
we can supply you with genuine PROGRESSIVE Everbearing
plants, guaranteed to be TRUE TO NAME and handled so as
to reach you in best of growing condition. Write for prices.

We have been growing and breeding the Everbearing straw-
berries for the past eight years and have many new varieties
growing in our experimental grounds that are not yet for sale.
We invite a personal visit to our grounds during fruiting sea-
son, preferably during August or September. The latch string
is always out.

THE GARDNER NURSERY CO., Drawer 103, Osage, Iowa.

Bobbink & Atkins

Nurserymen and Florists

RUTHERFORD, NEW JERSEY
Palms and General Decorative Plants, **INSPECT**
Conifers, Shade and Ornamental Trees **INVITED**

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Grower and Exporter of Fruit-Tree Stocks,
Forest Tree Seedlings, Rose Stocks, Shrubs,
Vines, and Conifers for Nursery Planting.

For all information as to Stocks, prices, terms, etc., address

Jackson & Perkins Co.
(SOLE AGENTS)
NEWARK, N. Y.

SCARFF'S NURSERY



Headquarters for
Small Fruit Plants

1200 Acres "At it 25 Years"

Strawberries	Currants	Rhubarb
Raspberries	Gooseberries	Asparagus
Blackberries	Grape Vines	Horseradish
Dewberries	Privet	Hardwood Cuttings
Berberry	Spirea	Butterfly Bush

100,000 transplanted Raspberry, Blackberry and Dewberry plants
for retail trade. See wholesale list before placing your order.

W. N. SCARFF & SONS
NEW CARLISLE OHIO

We sell to THE TRADE only, and make a specialty of

**OREGON CHAMPION GOOSEBERRY
PERFECTION CURRANT
CLEAN COAST GROWN SEEDLINGS**

We also have growing for fall delivery a large assort-
ment of general nursery stock, including Fruit, Shade, and
Ornamental trees, Roses, Etc.

Head Quarters for Nursery Supplies.

Correspondence invited.

Portland Wholesale Nursery Co.

122 1/2 Grand Avenue, Portland, Oregon

A Large Stock of
**Apple, Pear, Cherry and Peach
Grape Vines, Blackberry and
Raspberry Plants**

And a general line of ORNAMENTAL TREES
and SHRUBS. All stock clean and thrifty, the
best that can be grown.

T. B. WEST, Perry, Ohio.

W. T. HOOD & CO. OLD DOMINION NURSERIES

RICHMOND VIRGINIA

We offer for Fall 1917 and Spring 1918, general line of
Nursery Stock—California and Amoor River Privet, Norway
Maples, Oriental Planes, Evergreens, etc.

We will have a heavy stock of Peach Trees and Norway
Spruces on which we can quote attractive prices

We expect to be in position to offer Natural Peach Seed,
crop of 1917. Send us your list for quotations.

W. FROMOW & SONS

Azalea mollis, Rustica and Ghent in all the leading varieties,
grown from layers not grafted.

Manetti Stocks clean and well rooted for grafting or open
ground.

Standard, Climbing, Weeping and Dwarf Roses in great variety
Rhododendrons, the cream of the Hardy American varieties.

Andromeda floribunda, japonica, and speciosa, bushy budded
plants.

Kalmia latifolia.

Green and River's Purple Beech in all sizes up to 12 feet.

Prices and full particulars on application.

WINDLESHAM NURSERIES

Surrey, - - - England.

ALL "AMERICAN NURSERYMEN"

Wishing to do business with Europe should send for the

"Horticultural Advertiser"

This is The British Trade Paper being read weekly by
all Horticultural traders. It is also taken by over 1000 of
the best Continental houses. Annual subscriptions to cover
cost of postage, \$1.00. Money orders payable at Lowd-
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cants should, with the subscription, send a copy of their
catalogue or other evidence that they belong to the nursery
or seed trades. Address

**Editors of the "H. A." LOWDHAM, NOTTS,
ENGLAND**

TREES

Largest assortment in New Eng-
land. Evergreens, deciduous trees,
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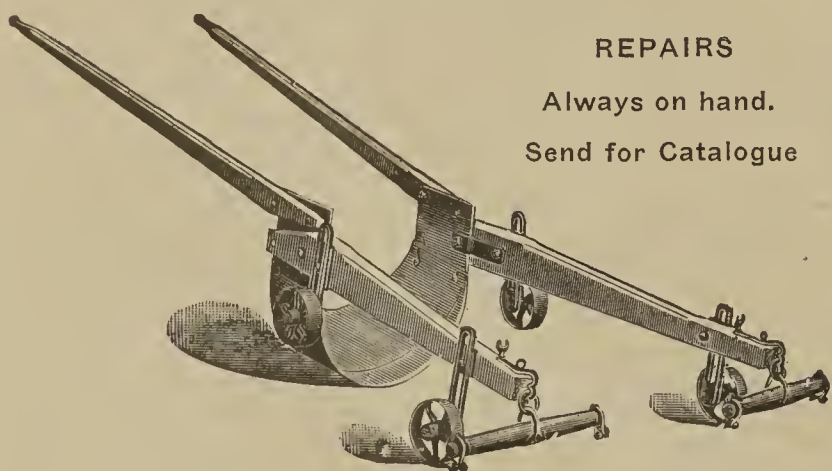
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The National Nurseryman Publishing Co., Incorporated

Vol. XXVI.

HATBORO, PENNA. JULY, 1918

No. 7

The Forty-Third Annual Convention of the American Association of Nurserymen

IN TIMES gone by, if you happened to drop into the hotel headquarters on the morning of the day preceding the opening of the convention you would find a few "early birds," and during the day a few more would drop in, but not until the morning of the convention did the majority of the nurserymen appear. More recently, however, you would find quite a handful of these men camped on the ground two days ahead, and a larger proportion rolling in the day before the meeting.

This year, however, though the convention did not open until Wednesday, as early as Sunday morning, the chairs in the rotunda of the New Sherman House were held down by Bert Lake, the two Chase boys, Henry and Bob, and of course Charlie Perkins, C. R. Burr and Jim Fraser. Also, if you looked closely, you would see John Dayton, Ed. Welch, and other prominent nurserymen. By Monday night there were enough to make a goodly sized crowd, and by Tuesday, pretty much every one was there.

In the absence of the President, Major Lloyd Stark, the convention was called to order Wednesday morning by Vice President J. R. Mayhew, who continued to preside at the several sessions.

Led by Henry Chase, two verses of "The Star Spangled Banner" and one of "God Save Our Splendid Men" were sung by the entire assemblage and there were many fathers there who voiced a silent "Amen" at the conclusion of the latter song.

This was followed by an invocation which was sent by the Rev. C. S. Harrison, who was unable to be present.

Mr. Graw, of the Chicago Chamber of Commerce, in a strong and inspiring speech, welcomed the nurserymen to Chicago, his remarks being frequently interrupted by loud and continuous applause.

J. M. Pitkin had been scheduled to respond, but was nonpulsed to find that Mr. Graw had departed immediately he had concluded. "Jim" arose to the occasion, however, and addressed his remarks to the chair vacated by Mr. Graw.

Henry Chase read a message from Major Lloyd Stark,

and upon its conclusion, a committee of three was appointed to draft a reply.

A MESSAGE FROM SOMEWHERE IN FRANCE OR ON THE WAY.

From Major Lloyd C. Stark

Mr. President and Members of the Great American Association of Nurserymen:

To-day, I am not with you to answer the roll call, but I am not a deserter. In leaving you, in tearing myself away and denying myself the honor of presiding as your President, I have sacrificed something that is very near to my heart. But not to see your faces, not to be with you to shake your hands and meet you again—that is the greater sacrifice.

All I am or hope to be I owe to my country—the land that gave me birth, and educated me. When the call to arms came, when the bugle sounded, when the cries of bleeding Belgium and ravished France echoed in our ears there was but one answer and one choice.

In these days of anguish, with the whole world on fire, and the very fate of humanity hanging in the balance, the man who has been trained to fight sees but one road—the road to the sea and over, and on through France to Berlin.

To-day my Battalion is on that road—and I am with it. We shall not return soon, perhaps never, but rest assured my dear friends that my heart is with you—and my thoughts and good wishes—always.

Those of us who go to fight and give our lives and our all, do so joyfully. And those of you who cannot go—whose ties and responsibilities point to the path of duty there at home—you are no less patriotic than those who fight. Do your duty well, work harmoniously together to preserve and protect and upbuild our noble calling—so important to the health and sustenance of our people in these days of war and privation. Food alone won't win this war, but great stores of American foods and millions of strong-hearted American men will win. As Kipling says:—

"It ain't the guns nor armament
Nor funds that they can pay,
But the close co-operation
That makes them win the day.

"It ain't the individuals,
Nor the army as a whole,
But the everlastin' teamwork
Of every bloomin' soul."—

Just as our armies have almost insurmountable difficulties to overcome, so you have now and will have perhaps to an even greater degree in the future war years, tremendous problems to solve.

In this great Association of ours there are many divergent interests, therefore, self-sacrifice on the part of the few for the benefit of the whole nursery profession may at times become necessary. And when that time does arrive, as it will, pull together, be of strong heart and keep the faith, remembering always that whatever benefits the majority must in the end benefit the whole nursery profession.

I shall not attempt to suggest or advise or even discuss the various weighty problems that will come before you at this Conven-

tion, but one word I will say and that is, beware the idea that the war will soon be over or even won in a few years. As yet this great and prosperous nation has not felt the heavy hand of want and privation and death and sorrow—but before victory is ours, we shall pay the price. So when you lay your plans and build your foundation, look the situation straight in the eye and be ready with a ship so strong that she will weather the storm.

Once you have adopted your plan of action stand to your guns without flinching, remembering always that old army axiom:

"A fair Battle Plan of Action
well executed is better than the
perfect plan poorly done."

As I see it from a distance, for the time at least, the "Price Problem" seems to have about solved itself.

Transportation is the greatest problem before the nurserymen to-day—no one thing, not even the most drastic legislation can so quickly cripple or even destroy the whole nursery profession, as thoughtless, ill-advised and needless freight embargoes and the like. In any plan of action you adopt be sure that transportation matters are given every possible consideration and that they are placed in hands of men who know the ropes at Washington and can get results and score hits when an emergency barrage is called for from the Front Line Trenches.

There are of necessity many able though inexperienced men sitting in high places in Washington these days. Lack of knowledge as to the perishable nature and great value of trees as food-producers by some of these men, may cause trouble.

Let "preparedness" be your watchword concerning both legislation and transportation. Sleep with one eye open and keep that eye trained on Washington.

I have faith in the future of the nursery business after the war and during the war. Of necessity, during the war, those of us who can should raise all the grain and food products we are able to grow. That is our Patriotic Duty. Those who can, and do not are surely slackers of the worst order. No matter what befalls, no matter what business disasters loom up ahead, keep your nerve and your head and stand by the organization to the last ditch. Just remember that some poor devils somewhere—thousands, perhaps millions of them—are willingly standing the gaff, clear to the hilt, dying game and fighting till the last man bites the dust, if need be. They are keeping their nerve—and they've got to have good team-work or they will lose their own skins.

I am delighted to see that co-operation, tolerance and faith in each other is developing to a higher degree than the most sanguine optimist of a few years back could have hoped for. Brother Nurserymen, it is the straight and narrow path to success—and we are on our way.

Like the nation itself, there is no longer that sectional feeling and lack of co-operation—no longer a North, a South, nor East nor West—one nation and one great National Organization—**THE AMERICAN ASSOCIATION OF NURSERYMEN.**

Once more fellow members permit me to thank you for your confidence and the great honor you bestowed upon me last year in Philadelphia. My only regret is that I could not serve as your President, but I am serving your country to the best of my ability.

And now my friends—each and every one of you—, Good-bye, Good Luck and God bless you and yours.

June 28, 1918.

Major Lloyd Stark,
On the Firing Line,
Somewhere in France.

Dear Mr. President and Friend:—

In accordance with the instruction of the Association, we desire on its behalf to most gratefully acknowledge receipt of your "message," addressed to the Association, which was read at its opening session in the City of Chicago on the 26th inst.

It was anticipated one year ago, when you were chosen as the head of our organization, that we would have the privilege of hearing your annual address delivered in person, but the fate of the civilized nations decreed otherwise.

While we were disappointed in this anticipated privilege, the prevailing situation had greatly increased the appreciation with which your message from across the seas was greeted.

We, as members of the greatest organization of nurserymen in the world, are inexpressibly proud of the fact, that our President should so gladly hear and promptly accept the call of his Country to service in the gigantic struggle, which shall determine the fate of the civilized nations of the world.

We shall be deprived of your pleasant comradeship and wise counsel in our deliberations during the Forty-third annual convention of your beloved organization.

Our loss however, is incomparable with the expected value of your service to the cause of humanity at large, hence we most willingly bow to the inevitable.

We desire, however, to again assure you of the sincere appreciation with which your message was received and most heartily thank you for the same.

We extend greetings from every member of this Association and assure you of our kindest regards and best wishes.

May "He who holds the waters of the sea in the hollow of His hand" protect you from all bodily harm and return you ere long to your beloved country and friends, is the sincere wish of every member of this Association.

Respectfully yours,

J. W. HILL,
HENRY B. CHASE,
J. S. KERR,
Committee.

P. S.—"The gang's all here" and gives three cheers for our President On The Firing Line.

Various reports of committees were taken up and disposed of.

Dr. E. C. Stakman, St. Paul, Minnesota, read a paper entitled "Banish the Barberry and Save the Wheat."

This paper called forth considerable discussion, which at times threatened to become heated, but the air was finally clarified by the passage of a resolution offered by J. W. Hill, in which the nurserymen agreed to destroy all common and purple Barberry in their nurseries.

The Secretary's report was very comprehensive, and its reading was followed with great attention.

A most interesting discourse was given by L. D. H. Weld, Manager Commercial Research Department of Swift & Co., on "Marketing Methods."

At this point, Mr. J. W. Hill took the chair, and the resolution and amendment to the constitution offered at the Philadelphia convention last year, and carried over for action this year, was taken up.

Mr. J. R. Mayhew was given the floor and read the following statement:

WHY WE SHOULD ADOPT THIS RESOLUTION AND AMENDMENT TO CONSTITUTION

Mr. Chairman and Gentlemen:

I believe there are some good reasons why we should adopt this resolution and amendment to constitution as offered. With no intent to be extravagant, I believe this is the most important hour in the history of the American Association of Nurserymen, an hour fraught with wonderful possibilities, if we make no mistake, and one which will redound to our irreparable loss if we fail to do the right thing.

It is not my intention to make any extended argument for the adoption of this resolution and amendment to constitution, and I can scarcely hope to say more than has already been said during the past two years, because this whole matter has been before us for twelve months and, I take it, is pretty well understood by all; neither would I presume to offer you superior judgment concerning a matter about which you are as well or better qualified to judge for yourselves. It is, therefore, with the purpose of endeavoring to assemble the argument I have heretofore made for the adoption of this resolution, to get the whole matter before us as clearly as we may, that I speak, leaving it to your good judgment to accept or reject as you may elect. To say the least of it, no one can say, after the question has been disposed of, whether he be for the resolution or against it, that he has not been given an opportunity to express his views, for no matter ever considered by the Association has been given wider publicity, and the membership has been invited repeatedly to discuss it from any angle they might elect. Those of us who were favorable to the adoption of this resolution at Philadelphia last June are responsible for its being held before us for a year, to the end that no mistake which due consideration would overcome, would be made by its hasty adoption. As was expressed by one speaker at Philadelphia, "if it will not stand the fire of criticism for a year it is not worthy adoption." Your adoption of

the resolution or your rejection thereof will answer this question.

Personally, after the most deliberate thought I am capable of giving the question, I am as enthusiastically in favor of the adoption of the plan incorporated in the resolution as I was a year ago, and my opinion has been reinforced by the action of two of our largest district associations, the Southern Association at Atlanta last August, and the Western Association at Kansas City last January. Both of these splendid associations adopted unanimously a resolution favoring the adoption of this resolution and the pending amendment to constitution.

At Detroit in 1915 I had the honor of presenting to you a plan for the reorganization of the American Association, and your committee of twelve brought before you their report based upon these recommendations which you were kind enough to adopt, and which have since been your organic law. The constitution, as finally adopted represents the best thought of this entire committee, and, to my mind, it is so nearly perfect that, with one exception which I shall later name, it fully meets your requirements to-day. There is, therefore, no thought of reorganization, the reorganization occurred three years ago. In fact, under the broad provisions of your constitution, there is nothing in the resolution before us which your Executive Committee has not full power to do, and it is only with an idea of directing the Committee where they might hesitate that the resolution is offered.

Again referring to the original plan offered at Detroit, in my address before you on this occasion, I stressed the necessity of a central general office, you will remember, and an all-year-round secretary who should be a man knowing the problems of the nurserymen, and who would be on the job three hundred and sixty-five days in the year exclusively for your interests. This is the main thought in the resolution now before us. Furthermore, the original Article VII of the constitution offered was practically the same as the amendment before you at this hour, but, in the wisdom of your committee, was offered as your constitution now reads. I am saying all this only to prove that while this matter has been before the Association for twelve months, it has in reality been in the minds of some of us for more than three years. It would perhaps have been unwise to have gone further in 1915 than we then went, but after three years, I believe with all my heart that we are now ready to make this Association a real business organization.

THE SECRETARY-MANAGER—HIS OFFICE

Very naturally around this man revolves many questions which can not be answered in a day, or in a year for that matter, and in the minds of many this is the real heart of the question. In approaching this question I have argued thus: (1) there is a vital need for a man for his entire time, one who will give his all in service to the nursery interests; (2) that he should be about the biggest man in all the land, lovable, unselfish, a man of splendid mind and heart, and organizer. That he should know our problems, if not in the beginning, that he should assiduously make this his one study; (3) that such a man would be of inestimable value and that he would command a salary commensurate with the service he is supposed to render; (4) that there is always "a man of the hour," and that for every man need there is a man. So reasoning, this has not appeared, to my mind, such a problem as it has to some of you. I was impressed with a statement which came to me after our discussion of this whole question last year at Philadelphia. Someone, in a flight of oratory, had made the statement, "A Moses is needed to lead the nurserymen out of the wilderness of doubt." One of my friends said to me, in speaking of this discussion, "We need a Moses, and we need a greater than Moses, we need a Jesus Christ." Now, both of these men were nearer right than one would think, for, after all, great problems, if solved, must be solved in a spirit of reverential service and sacrifice. The spirit of Christ and Moses is just as necessary in the successful conduct of a nursery business as in the successful conduct of a Sunday school, and the world is fast coming to a recognition of this fact. The man who makes good in this large place we are to-day considering will be that man who is willing to dedicate himself in honest, unselfish service to the cause of upbuilding the nursery interests of America. Can a man with these splendid attributes be found? Certainly. There are no truer men on earth than the men who make up the membership of this Association, and, if needs be, we will select one of you to put this thing over, and if you make good, and you will, we will build, in commemoration of your services, a monument that will reach to the skies.

This resolution, you will remember, was last year referred to a special committee, and the following is their report as it appears on page 159 of the report of the Philadelphia proceedings: "That when the Executive Committee deem that they have found the capable man described in the resolution, and when in their

judgment, the necessary funds are available, the adoption of the J. R. Mayhew resolution is recommended." In speaking to this report at Philadelphia, I stated that it was not to be hoped that the man would be found until the Association had gone on record empowering the Committee to find the man. The same thing is true to-day, and will be true to-morrow, in this regard. We can, if we will, my friends, both find the man and provide the necessary fund for the ongoing of the work before we leave Chicago, and we should, and I am confident we will.

WHAT THIS ORGANIZATION WOULD ATTEMPT TO DO

Some time during the Kansas City meeting a question something like this was propounded to me: "How would you keep this Secretary-Manager busy, and what would this organization be expected to do?" Now, I would not presume to say what should be the scope of your Secretary-Manager's duties, because this is a matter which would most wisely be left in the hands of your Executive Committee, but there are a few things which I think it would not be out of place to suggest as a probable outline of at least a part of the duties of this office and its Secretary-Manager.

(1) He should endeavor to bring into the Association every worthy nurseryman in America. With a membership of five hundred we have accomplished much good, but with a thousand members, and this is not impossible, we could do a greater work. Under this resolution I believe the membership will grow rapidly. To accomplish this your Secretary must, at considerable expense, get close to the heart of the people he serves, but that has already been agreed upon because he must be an organizer. In this matter of membership there is necessarily a divergent opinion among us. Some hold to the opinion that membership should be "restricted," "exclusive," "selective," that the sessions should be "secret," that "confidential" is the key which will unlock the store-house of knowledge and solve the problems which confront us. Others of us believe that the fullest publicity compatible with business rules will best serve our interest and that seldom, if ever, is the closed door necessary, that there is little or nothing which conspires among the nurserymen which the public cannot be invited to share, that the American Association of Nurserymen should take over every clean business in the United States, whether the business represents one thousand dollars in sales per annum or one million dollars in sales per annum; that there should be but one question asked: "Are you doing a clean business, and will you live up to the constitution of the Association?" We do not care how "little" you are if what there is of you is clean, and do not care how "big" you are, or how "old" you are or how "respectable" you are; if you are unclean in your methods, if you are unfair in your dealings, if you do not intend to live squarely up to the provisions of this constitution, you cannot "play in our back yard." There are organizations doing a large volume of business annually whose business ethics smell to high heaven, and, whoever they are, they should be driven into the world with the mark of Cain stamped in their foreheads. Whatever else we do, my friends, let us make membership in the American Association of Nurserymen a synonym of honesty, justice, and truth. The wording on our letter-heads, "Members of American Association of Nurserymen," should carry with it a guarantee of 100% honest, 100% efficient.

(2) Quoting from the resolution: "That the Executive Committee cause to be gathered through the organization provided herein, statistics of every character needed by the membership in the conduct of their business," this opens up a field of endeavor so important, so broad, and at the same time so neglected, that one's endeavor is limited only by the possibility of procuring funds sufficient to prosecute the work. I do not think it is necessary to elaborate this field of work because I am sure that research in one line will open up richer and larger fields. What I have particularly in mind is, (a) we should know decidedly more about the costs of our products than we do. Right here, may I say that success or failure of the splendid effort that is being put forth by the Market Development committee will be largely determined by two things: (1) the perfecting of a cost accounting system, and (2) the working out of proper standards which must obtain in the conduct of the nursery business. Therefore, I believe with all my heart that the hope of the Market Development plan is wrapped up in this question. Both of these problems will be committed to the organization proposed and both, I believe, can be solved. It is, to my mind, necessary that we endeavor to determine what our costs are, both in production and operation. (b) It will be entirely in order for this organization to gather, compile, and disseminate information (1) on our annual needs based on averages during normal years, and (2) to gather, compile, and disseminate statistics showing surplus stock in hands of member growers, which will tend to es-

establish a "system of co-operative buying and selling among members of this Association." If such a thing can be done, and I do not doubt it, not only will it prove a great convenience to the buyer as well as the seller, but it will save a tremendous amount of stock from the brush pile every year. As has been stated on a number of occasions before when this question was under discussion, hundreds of thousands of dollars worth of stock go into the brush pile each year because of the lack of co-operative plans for distribution. I believe this feature of the organization's efforts alone would make it at least worth a trial. (c) Statistics of a more general nature relating to any of the many features of the business could, with propriety and profit, be assembled by and through this organization, making it in very truth an encyclopedia of information for the nurserymen, but as there are other phases of the work which the organization might, with profit to you, contemplate, I will leave it to your imagination to suggest other valuable data under the head of "gathering statistics." One has only to think just a little of the question to realize how necessary and how wide is this particular field.

(3) Standardization. While the resolution provides for a

rect standards than has ever been true before in the twenty-five years I have known them. Furthermore, as a result of that conference, this will prove the most profitable year we have experienced in many. In all probability our volume of business has been greater in past years, but our volume in the past has been on the wrong basis. I do not want to leave the impression that this conference was called to fix prices or to do anything contrary to well established rules of ethics and jurisprudence, not that; we simply met and talked over problems of advanced costs, of supplies, of stock, etc., and the necessity of closest co-operation, and every man left that conference and returned to his office to dictate a new price list for his salesmen. This thing worked in the Southwest and it will work in the United States. It does not take a man of real good sense to realize that to-day he must get more for his goods than he did in 1914-15, or in 1917 for that matter, but there is a great big question in the minds of many men, and that question is, "I am forced in contemplating my own plans to consider what my competitor is going to do." There is also a question in all our minds as to what is just and right in the premises, hence, if it were possible to work out an



*J. R. Mayhew, Waxahachie, Texas,
President, American Association of Nurserymen.*

special committee on standardization, it would, after all, devolve upon the Secretary-Manager to devise ways and means to bring about this long neglected work of attempting to standardize the nursery business of America. I have heard men of good minds and business acumen say that while this thing was greatly to be desired, it was impossible to accomplish. With all due respect to my friends, I do not believe it. Furthermore, if we cannot some way work out plans that will bring about a more stable condition, I see little hope for the nursery business. Early in the season, I think it was February, I received a letter from one of my Texas friends asking me to endeavor to get together the nurserymen of Texas and Oklahoma for a conference on this very question. The request being in accord with my ambition nationally, I selected some fifteen nursery firms, doing perhaps 90% of the business of the Southwest, and invited them to attend this conference. Every man invited, except one who was out of the state, attended and, as a result, there is to-day among the nurserymen of the Southwest the nearest approach to cor-

equitable basis which would govern for the year, or for any number of years, it would save many firms from serious loss or bankruptcy. Serious as is the question of low prices, however, and the lack of standards here, more serious, if possible, is the question of our utter lack of standards from an ethical point of view. If we could throw on the canvass before this Association at this hour the loss and unnecessary trouble that results from a lack of standards among us ethically, and each of us know that the things that are hinted at here are true, I think we would conclude that if we were able to do nothing more than to work out proper standards which should govern our dealings one with another, it would be worth the cost that we would put into this organization. The resolution before us provides that a committee composed of representative men engaged in every line of nursery endeavor be appointed to work out a basis of standards which shall govern the nurserymen in their dealings one with the other. This provision of the resolution is so broad that wherever the question of standards enters into the matter the

minds of the committee will be directed.

(4) Purchasing supplies. I am confident that such an organization as is proposed could, with great profit to the membership and without liability to the Association, assume the relation of purchasing agent in the matter of supplies for the membership. The question appeals to me as a safe business proposition and I doubt not, if put into effect, but that it will become one of the most popular departments of our organization. If we could go to the different mills over the country with a requisition for so many million feet of box lumber, it would be easier to handle and be possible of handling on a better basis than where each of us attempt to handle on an individual basis. Right now it seems to me to be not only a question of prices on box lumber, shingle-tow, etc., but a possibility of finding these things at any price. We need annually a given supply of these items and our needs are out of the ordinary. The regular mill-run on lumber will not meet our requirements and each order must be cut specially. This thing is always more or less of a problem, but this season, because of government contracts, the question of box lumber and supplies in general is one of the most serious problems that confront us. Whether there was any great amount of saving directly or not, such a scheme as I am presenting would at least prove a great convenience and, to say the least of it, would be worth looking into.

(5) Transportation and auditing department. We are all hoping that the season of 1918-19 will show a big improvement over last season in matters of transportation, but we have little or nothing to base our hopes upon. As long as we are at war the question of transportation will be a serious problem, and after peace is declared it will still be a problem. I am confident that this organization should attempt to assist the membership in all matters of transportation, especially as it pertains to the matter of rates and movement of freights, and that under the direction of a capable transportation man it would prove one of the biggest things we ever attempted. This department should become general auditor of freight and express bills for the members of the Association, and I am more than confident it will pay its way from the beginning and save the nurserymen many thousands of dollars annually. In connection with every other phase of our business, this particular question of transportation will need to be watched just a little closer during the coming season, and as long as present conditions last, than ever before in the history of our business. This particular department of the organization that is proposed can and will render the members of this Association a wonderfully great service and, of necessity, should be in the hands of a man who, through training and otherwise, is especially fitted for taking care of this particular phase of the work.

General. As before stated, I will not presume to define the multitudinous duties of the office created by this resolution, but when, in addition to the work I have briefly outlined, we contemplate the field of legislation, the credit and collection bureau, together with the work of our numerous committees which would be more or less coordinated to the general office, surely I have justified the establishment of such an office and just as surely would the man who fills the place be kept busy. What I have had in mind all along is that this organization would become a clearing house for the membership of this Association, that it would attempt to serve intelligently the nursery interests of America in any capacity whatsoever and in ways prescribed by your Executive Committee. It would be idle to think that in a day or in a year we could so nearly perfect our plans that further thought would not of necessity have to be given them, but we can at least inaugurate this splendid work along such lines that, as is true of everywhere else in life, our plans can be reworked here and there as occasion may demand. As I have already suggested, the resolution we have before us must, of necessity, be considered in relation to

The Market Development Plans. There will be presented to you on to-morrow the most comprehensive plan for Market Development ever considered by the nurserymen. The majority of us are hoping that the committee having this matter in hand will succeed in this great undertaking, and to this end we have subscribed to an annual fund to be expended in the development of our markets. I believe, and with the best of reasons, that the hope of this great publicity plan is dependent upon the action taken on this resolution. The market development plan is an attempt at cooperative advertising. Now, cooperation is possible only among people who hold to a general standard. If we, as contributors to this fund, hold to a number of varying standards, and I use this word in its broadest possible application, we may not utterly fail, but we will fall far short of that larger success we strive for. Furthermore, one of the first questions which will confront the managers of the Market Development in dealing with publicity experts will be costs. "What is your system of

cost accounting?" No corporation on earth, except a nursery corporation, would consider putting on a quarter of a million dollar publicity campaign without first determining such fundamentals as supplies, costs, transportations, etc., etc., etc. Now, this is just what this resolution would do, attempt to determine as nearly as possible those questions which would make possible the success of your market development plan, and until these vital questions have been determined, every dollar spent in cooperative advertising will bring meager returns. Do not think for a moment I am not in hearty favor of the very best it is possible to obtain in publicity. I am willing to go my limit to further the plans now under consideration, but I think we should, by adoption of this resolution and proposed amendment clear the way for a successful publicity campaign, without which I am in serious doubts as to the results. Therefore, I am in favor of making secure the splendid efforts of the committee on Market Development by first adopting the resolution we have before us.

AMENDMENT TO ARTICLE VII OF THE CONSTITUTION

I have taken more time than I really intended in the discussion of resolution before us, and, as I have already suggested, the constitution is broad enough to permit your Executive Committee to do all that is embraced in this resolution. The real question before us, therefore, is the proposed amendment to Article VII of the constitution which, to adopt, must carry two-thirds majority vote of active members present. If you vote to adopt this amendment, it certainly would be in order to adopt the resolution, which would be by majority vote, but if you deem it unwise to adopt the amendment, by no sort of means should the resolution be adopted as it would only embarrass your Executive Committee. You recall the report of your Secretary and Treasurer, and by this report you understand that the revenues under your present constitution have been inadequate to meet the current expenses of the Association under existing budget, hence, regardless of whether you determine to continue under the present budget or under a new one, it seems necessary to revise our present financial plans. The condition of our treasury is not calculated to excite bouyancy of spirit, as it might were our balance "cash on hand" greater, and in considering this matter there may be a disposition on the part of some to criticise, but I am sure that in every instance your committee has been judicious in the expenditure of Association funds. Furthermore, that from time to time the Association has, by direct mandate, directed the Committee in all matters which called for the expenditure of funds out of the ordinary. May we, then, approach this question, not as it is related to the past but as it is related to the present and to the future. Your Treasurer's disbursements from June, 1916, to June, 1918, are \$3000.00 in excess of receipts, and this is the whole story in a nut shell. If the membership fees and dues are to remain the same as at present, it will be necessary for the Committee to completely revise its budget for the ensuing year, whether you adopt the resolution before you or not. But, my friends, it should not so stand, for a little study will, I think, prove the desirability of a change. Under present constitution, members doing a \$10,000.00 annual business pay the same annual dues and fees as members doing an annual business of \$19,000.00; members doing \$20,000.00 annual business and members doing \$49,000.00 annual business pay the same; members doing \$50,000.00 annual business and members doing \$99,000.00 business pay the same; while members doing \$100,000.00 annual business and members doing \$500,000.00 or \$1,000,000.00 annual business pay the same. The inequality of this schedule is apparent when we study it aside from the fact that it does not create funds necessary to maintain our expense account. The proposed amendment, which, if adopted, will supplant Article VII of the present constitution, provides first for a flat membership fee of \$10.00 to be paid by active as well as associate members, and for additional dues based on annual business as follows: \$100,000.00 or more, \$100; \$75,000 to \$100,000, \$80; \$50,000 to \$75,000, \$60; \$25,000 to \$50,000, \$40; \$15,000 to \$25,000, \$20; \$5,000 to \$15,000 \$10. Is it not a reasonable tax for the benefits we hope to receive? I would count myself niggardly indeed were I not willing to contribute so small a part of my earnings to make more tolerable the conditions in the nursery world, aside from the direct benefits guaranteed. This question of taxation, wherever we find it in life, and it is of necessity everywhere, is a problem which vexes and annoys. I am not unmindful of the fact that he who proposes an increase in taxes subjects himself to the wrath of even some of his best friends, and yet, gentlemen, a fair and equitable adjustment along such lines as will meet the needs of our financial committee is not only a necessity, but, judiciously expended as the funds will be, it will prove so beneficial that it will be acceptable to the entire membership. The plan which is proposed in amendment which you will vote upon will provide funds sufficient to guarantee the service briefly outlined in reso-

lution, and, as I have already stated, I believe it is the fairest plan that could be proposed.

In conclusion, may I say that in all I have said my only thought has been to offer a plan which will ultimately prove of benefit to the nursery interests. As has already been stated, it is not to be hoped that this will be a panacea for all our ills or that we may be able to start to-morrow with a perfectly equipped organization—not that—but what is proposed is a general ground work—a foundation upon which we can begin to build and which in due time, I believe, will serve us intelligently and acceptably. Organizations of the magnitude such as is here proposed are not built in a day or in a year. Men must be developed to carry on the important work contemplated, which will take time, and underneath it all, back of it all, and around it all must center your sympathy, patience, and cooperation. If you are willing to adopt the proposed amendment, thereby providing necessary funds for the ongoing of the work, it should be with that practical unanimity which will guarantee its success, and it must be with the consent of two-thirds of the members present. As I have before said, you should vote on the amendment before you take up the resolution, for the adoption of the resolution without the amendment would create an embarrassing situation. I leave the question in your hands, and because I believe in its efficacy, because I believe it means a better day for you and for me, I hope you may vote overwhelmingly the adoption of both amendment to Article VII of the constitution and the resolution.

We should approach the whole question, not only as it relates to each of us individually and as a whole to-day, but as it relates to the future. With most of us, the legacy we will leave to our families will be our established business. When I meditate upon the service each of you have rendered the world, and think how poorly you have been paid in dollars for that service, when I think of how arduous must be the labor of those who must take up the work where we leave off, I think nothing should intervene in making more stable the business which we represent, if for no other reason than that our loved ones may be protected. I think our action here to-day, this very hour, will not only influence the destiny of the nursery interests of America to-day, but far into the unknown future its influence will be measured. We may reason that the day with most of us is far spent, that somehow we have managed thus far to get by, and that for those who come after us, let them, as have we, work out their own destiny. But are we justified in such conclusions?

The discussion which followed, took a wide range, and it taxed the abilities of Chairman Hill to keep it within proper bounds.

Mr. Atkins wanted to know if a nurseryman who was also doing a florist business would be expected to pay dues on the basis of his entire business. Chairman Hill replied that according to his understanding such would be the case, but Mr. Mayhew said that it was his idea only to figure on the basis of the business of the nursery department.

In answer to an inquiry by Mr. Flemmer, Mr. Mayhew said that the new schedule of dues had the endorsement of the Executive Committee.

Mr. E. S. Weleh did not think it would be possible to carry out all the propositions of the "Resolutions" but that only such portions as referred to transportation and legislation, and that the gathering of statistics and similar matters should be left for more settled times.

Mr. Mayhew, in answer to a question from Mr. Pyle, stated that it had been estimated by the Executive Committee that the new schedule of dues would produce a revenue of between \$15,000.00 and \$17,000.00 per year as against \$5,000.00 to \$6,000.00 on the present scale.

The "Amendment" was then adopted.

At a later session, on motion of Mr. J. W. Hill, the new schedule of Membership Dues was revised to read, \$100, \$75, \$50, \$25, \$15, and \$5, respectively, plus the regular dues of \$10.00 per annum.

The passage of the "Resolution" was then taken up,

and Mr. Wyman moved that it be laid on the table for one year. The motion was seconded and carried.

At the opening of the Thursday morning session, various Committee reports were taken up and disposed of:—The great item of interest, however, centered in the report of the committee on Publicity which was immediately followed by the subject of "Market Development," and Mr. Robert Pyle was called to the chair:

In conclusion, Mr. Cashman said that right now was the time for the nurserymen to show their faith in the movement by offering their subscriptions.

A blackboard was handy, and for some time it kept Henry Chase busy recording the names and amounts, (*a complete record of the subscriptions to date and report of discussion will be found in another column of this issue.*)

The report of the Vice-President on nomination for officers was read and on motion, seconded and carried, the secretary was instructed to cast the ballot, and the following were then declared elected:

President, J. R. Mayhew, Waxahatchie, Tex.

Vice-President, J. Ed. Moon, Morrisville, Pa.

Treasurer, J. W. Hill, Des Moines, Ia.

EXECUTIVE COMMITTEE

C. R. Burr, Manchester, Conn.

C. C. Mayhew, Sherman, Tex.

Place of next meeting, Chicago, Ill.

The remaining sessions of the Convention were taken up with the reports of the committees and the reading of several papers as outlined in the printed program.

The Convention closed Friday at noon.

It was rumored the Executive Committee held a session after the close of the convention, and re-engaged Curtis Nye Smith, Boston, Mass., as legal attorney for the Association, and he will also continue to conduct the Collection Bureau.

Also that they appointed Chas. M. Sizemore, Louisiana, Mo., as Secretary. Mr. Sizemore will also operate a bureau for the collection of overcharges on freight shipments. It is anticipated that he will be able to secure the refund of many hundreds of dollars in over-charges.

War Times and The Nursery Business

Mr. President, Ladies, and Gentlemen:—

When on April 2, 1917, President Wilson, in that memorable address before Congress, declared that a state of war existed between the government of the United States and the Imperial German government, the business of this nation became war, and it will continue to be war until Prussian militarism is crushed, until victory for the allied armies is assured, and the world is made a safe place in which to live. It is strange that after so much has been written and spoken everyone is not familiar with our aim in this world conflict, and yet it is true that there are still a few who are in doubt here. Down in Oklahoma a few days ago an Indian soldier returned home on furlough. One of his friends, meeting him on the street, asked, "John, how do you like army life." The 'first American' replied, "Me no like it; too much salute not enough shoot." This further question was asked, "Do you know why you have been drafted for army service." Without hesitancy the Indian replied, "Yes, me know. Make whole world democratic party." Now, this Indian had a true conception of the matter and we of the democratic household of faith know that when the world comes into a full acceptance and practice of that faith that the day of the Kaiser is doomed.

I think that the committee had in mind that I speak to you of the nurseryman's relation, of his place in world affairs as related

to the war, and if I had an hour rather than ten minutes there are some things I would like to say.

When we review the pages of history, we find that God's original plan for man's government was a plan of democracy. There came a time when, to be like other peoples round about him, man overthrew the divine plan, demanding a king to rule over him, and the world has been in a turmoil over the question ever since. The present war, which to-day envelopes practically the world, is the natural outgrowth of two contending forces—of two distinct ideas of government: autocracy on the one hand, with its despotic emperors and Kaisers—and democracy on the other, holding to the belief that all power is vested in the people. Between these systems of government there is and can be no common ground. The Imperial German government is truly representative of that autocracy which believes in the divine right of Kaiser and kings, that the toiling masses are so many chattles to be exploited for the aggrandizement of the nobility, that might is the power which shall rule the world: while, on the other hand, the government of the United States, representing as it does the purest democracy on earth, contends that right is the law of God and must ultimately govern the world, that all men are created free and equal, therefore capable of governing their own affairs. To recognize that this is a contest between these ideas of government, we need only to look at the line-up. Germany, Austria, and Turkey, representing as they do the autocratic trio of the world, and England, France and the United States of America, representing world democracy. The facts are there is no longer room in the world for these two ideas of government. One of them must die. Students of history, with the eye of a prophet, have foreseen the conflict which to-day rends the world, and when the smoke of battle has cleared I hope and believe that this controversy which has been a world menace for so long will have been settled, and that our victory purchased at so great a price will purge the world of autocratic government forever. Our advent into this war, then, is not only right and proper but it is the most natural, for we, of all peoples on earth, revere democracy, and under the slogan of that great and good man, our Chief Executive and Commander-in-Chief, Woodrow Wilson, "we will fight until right is the law of the world," until Prussian militarism is banished from this earth. But what is your part and mine in all this?

More than three thousand years ago, upon the identical soil which to-day forms a part of the world's battle ground, two armies were contending for supremacy. On the one hand we see as the Commander-in-Chief that master statesman, prophet, and friend of God, Moses with his Commanding General, Joshua, in charge. Arrayed against the armies of Israel in vastly superior numbers are the heathen forces of Amalek. As the hour of battle approaches, Moses goes out upon the mountain to commune with God, and in his hand he carries the staff which has played so important a part in his own life and in the life of the nation. As the battle is staged, this staff, verily the wand of God, is outstretched over the armies of Israel, and Moses breathes a prayer to God for victory. All day long the battle rages and, as the story goes, as long as Moses' arms were outstretched the army of Israel won. Late in the day, out of sheer exhaustion, the hands of this old patriot dropped to his side. His power of endurance had reached its limit, his hands remained impotent at his side. At this juncture there came upon the scene two men who, while not fitted for service on the battlefield, recognized that there was a part that each could render, a place where each could serve, and, standing one on one side and one on the other, Aaron and Hur "held up the hands of Moses until the going down of the sun," and victory was won.

I hope that each of you may, for the duration of the war, make money, may make more money than ever before in your life, but only that you may be able to contribute, through tax and through investment in war securities and war charities, every dollar you are able to earn and spare from a most frugal and economical living. I do not believe that any one of us has a moral right to pile up profits for ourselves as long as this war lasts, nor do I believe our leaders will allow it. The profits of business, great and small, should, and doubtless will be, taken in tax if not invested in government war securities, and this, beyond question, is the government's plan. We should, with this purpose before us, by every honorable means, endeavor to make our business turn out profits, difficult as the proposition now seems.

We should renounce and denounce all destructive criticism as a war measure, and for the duration of the war. Most people are loyal, but occasionally we run across a blatherskite who knows just how to run the nation's affairs. He wants to tell you, that while he is every whit American, he deplores the serious mistakes our leaders are making, etc., etc. I am a peaceable man, but when I run across one of these fellows, whether he

addresses me or not, I just naturally "butt into him." I tell you it is the basest egotism to indulge in criticism about a matter we can know little about, and it is criminal negligence to allow the un-American whom we occasionally meet, and who finds delight in denouncing our leaders, to indulge in enemy propaganda, even though that propaganda be idle talk. I care not who is President, Secretary of State, War, or Navy, I am 100% American, and while this war lasts, by the help of God, I will hold up the hands of my leaders until the going down of the sun, until victory is won.

We should, by every means at our disposal, contribute to the production of food. Our business represents the highest type of agriculture, therefore we may, without serious loss or inconvenience, divert at least a part of our capital to the production of annual food crops, and no service, not even that on the battle front, is of greater importance at this hour. Our own army, the armies of our allies, and a large part of the neutral peoples of the world, must be fed, and if we fail in this service our armies will fail, and many peoples of the neutral nations will virtually starve. Never before in all the world has so gigantic, so Herculean a task been presented to a people as that which comes to us in the cry for bread from across the seas to-day, and we must not fail. We must produce the maximum in those staples most economical for export, we must consume the "substitute" and save the staples for our men who are fighting the battle of civilization.

And now, in conclusion, may I speak of one other thing, and the most important of all, even though my time is up. I offer no apology in speaking of this other service we may render, for surely during recent days a new precedent has been given us by those highest in esteem of the world to-day. There is certainly no disposition on my part to "preach" at you to-day, and I am sure that you who know me best know that there is nothing of cant in what I say, but I feel impressed to speak as I do. The world to-day is in the remaking, my friends, and each of us must, if we do a man's part, assume our responsibility. Business, society, politics, religion will not be the same again because of this baptism of blood. America has just begun to pay her toll in the lives of the fairest and bravest young men who ever went to war. As yet we do not fully understand, but we will understand, and when we do we will come into closer fellowship with God in prayer, and in life, and this is the service we must yet render. In 1914 when the thundering armies of Germany were battling at the very gates of Paris, when seemingly nothing stood in the way of the "triumphant German hosts" occupying the capital of sunny France, there was a halt, followed by a retreat, which up to this good hour has not been explained by military critics. On this occasion it is said that Lord Roberts was talking with Lord Kitchener when the telegram announcing the unlooked for German retreat was handed in. Lord Roberts exclaimed, "Only God Almighty could have done this," and Lord Kitchener replied, "Somebody must have been praying." On May 7th, in London, a special intercession service was held, and, commenting on the matter from the point of view of national influence, a writer of international fame has assembled the view point of some of the leading statesmen and generals of England and France. Under the caption, "Victory Depends on Prayer," the following extract from the pen of General Sir W. Robertson is worth remembering. "It is only when the whole empire unites in prayer as well as in work that we can look forward with confidence to a successful conclusion of this tragic war and to a just and righteous peace." This writer makes the further statement that Generals Haig and Beatty of the English army are men of devout prayerful life, and that when General Foch, Commander-in-Chief of the allied armies of the world, was interviewed on the subject of prayer, he said, "we shall be saved by prayer and it will not be the first time in this deadly struggle."

On the 13th of May of this year, a certain news item occupied a prominent place on the front page of every daily newspaper in the United States, and, as far as I know, nothing like it has ever happened before. The United States Congress, through resolution, petitioning the President to issue a proclamation calling the people of the nation to observe Thursday, May 30th, as a day of humiliation, of prayer, and of fasting, is, to my mind, most significant. You were impressed as was I, with the President's proclamation in answer to the resolution adopted by Congress, and with the acceptance of it all by the people of our nation. Suppose that here and there was one whose spiritual life was so calloused as to render him immune to the uplifting influences of a day dedicated to God in prayer, but most of us, I think, entered into the spirit of the occasion and joined our great President in the prayer that we might be found worthy of God's will being worked out through us. I do not know how all this impresses you, but to me it is a source of genuine thankfulness that first in our own nation are men at the helm of the Ship of

State whose minds and hearts are God directed. And then, as my heart turns to the blood drenched fields of France and Belgium, where our sons are pouring out their life's blood that a world may live and be free, I thank God that the leader of our soldiers in that field of carnage is a man who believes in the righteousness of our cause, who believes "that we shall be saved through prayer."

As a nation we are called upon to make the most stupendous sacrifice which ever came to a people, and we make the sacrifice because we believe it is right. America is yet to bear the brunt of Germany's defeat. We are, I fear, just entering a long night of suffering, of sorrow, and of trial, and, as the night grows darker and darker, as our casualty list grows larger, as we are called upon to give and give, our souls will be tried as if by fire. Through it all I pray that we may be true, that our courage may not fail, and that we may count it a privilege to give, even of our very selves, on the altar of our country. And, when the world has been purged of selfishness and greed, when the peoples who sit in darkness have seen the great light of freedom, when despotism as represented by Prussian militarism shall have been crushed to earth to rise no more forever, then, and not until then, can America say, "I have fought a good fight, I have finished my course, I have kept the faith."

REPORT OF THE LEGISLATIVE COMMITTEE OF THE AMERICAN ASSOCIATION OF NURSERYMEN FOR THE ANNUAL MEETING AT CHICAGO, JUNE 26th, 1918.

By William Pitkin, Chairman Pro Tem.

At the 1917 meeting in Philadelphia, your committee reported the situation regarding the ideas of some of the members of the Horticultural Inspectors' Association, favoring the absolute exclusion of foreign nursery stock. You were then advised that the Inspectors had appointed a committee, headed by Prof. Sanders, which was to confer with your committee at a later date, and you passed a resolution expressing the sentiment of the Association as opposed to the exclusion of foreign nursery stock, and authorizing the legislative committee and the executive committee to take charge of the matter, and confer with the committee representing the inspectors.

About August 1st, 1917, your legislative committee held a conference with Prof. Sanders' committee in New York City, and while the subject was discussed generally, no definite conclusions were reached, and the conference adjourned, subject to the call of Prof. Sanders.

Later, about November 1st and December 1st, there were meetings in Pittsburgh of various associations made up quite largely of our scientific friends, at which your committee was urged to be present, but we felt that nothing could be accomplished by general discussion in an open meeting, and insisted that according to agreement there should be another conference by our committees, and therefore, we did not attend the Pittsburgh meetings.

Contrary to the understanding and agreement, some of the associations or individuals meeting at Pittsburgh passed a resolution favoring the exclusion of foreign nursery stock, and following such action a bill was introduced in the United States Senate by Senator Weeks of Massachusetts providing for the absolute exclusion of foreign nursery stock, effective July 1st, 1918. That bill

did not receive the support of the Federal Horticultural Board, and has never been reported by the Senate Committee and probably will never be heard from again.

The Federal Horticultural Board announced a hearing in Washington on May 28th, 1918 to consider the general question of exclusion of foreign nursery stock, and particularly such items as are usually imported with balls of earth on the roots. Your committee consisting of Mr. Dayton, Mr. Meehan, Mr. J. M. Pitkin, Secretary Smith, and your Chairman, attended the hearing and a committee representing the American Florist Association was also present.

There were present, of course, many of our scientific friends, who talked very emphatically about the insects and diseases prevalent in foreign countries, and the probability that these dangerous insects would conceal themselves in the balls of earth so they could not be found under the ordinary methods of inspection and could not be killed by the ordinary methods of fumigation, and would thus enter this country and be prepared to spread destruction over the face of this fair land. One very prominent scientist had a list of 2000 such insects and was ready to give us the pedigree and family history of each one of them, but fortunately was shut off by the Chairman, Dr. Marlatt.

As a matter of fact, they had very little definite, positive information about these dangerous criminals but they did have a slight suspicion or fear that something might happen, and that the only way to safe guard this great and glorious country of ours was to positively prohibit the entrance of any foreign nursery stock.

They would be glad to see such a regulation in force at once, without regard to the available supply in this country and without regard to the effect of such exclusion on the nursery business, the orchardists and the general public. If we may judge by the statements that have been made in the past by some of these same men and their associates, they are now as they were then, "Worrying about a lot of things that will never happen."

Your committee took the ground that at the present time there was no sufficient source of supply in this country for fruit tree seedlings and rose stocks and many of the items usually imported with balls of earth; that the nurserymen had tried for years to develop that part of the business, and with the exception of apple, no material progress had been made and that even today there were not enough apple seedlings produced in America to supply the American demand; that many nurserymen preferred to import French Apple seedlings and pay more money for them, believing that thereby they could secure better blocks of better trees; that many of us had tried earnestly to produce fruit tree seedlings and rose stocks on a commercial scale, and had absolutely failed; that

attempts had been made to propagate Rhododendrons and similar items and that those attempts had been thus far unsuccessful; and that the nurserymen were ready to throw up both hands and acknowledge that we did not know how.

Further, we have felt in view of the fact that the United States Department of Agriculture was spending millions of dollars trying to solve the problems of the farmer and the fruit grower, that it was now up to the Department to take hold of the nurserymen's problems, and that if those problems could be solved by the Department and they could show us that an adequate supply of raw material could be produced in this country, every American nurseryman would be glad to buy his supply from American growers, and thus avoid the transportation risks always incident to foreign shipments.

We also said that pending the establishment of the fact that a supply of raw material could be produced on this side, no action should be taken by the Federal Horticultural Board excluding foreign nursery stock and no dates should be definitely determined.

We also said that we were ready and willing to co-operate with the Federal Horticultural Board and Department of Agriculture in such experiments and that our facilities so far as possible were at the command of the Department, but that we strongly felt that the Department should undertake this work, for no individual nurseryman or combination of nurserymen could command the capital, time and labor necessary to bring such experiments to any definite conclusion.

Years must elapse before it can be determined that such raw material can be produced in America, and beyond that further experiments will be necessary to determine that such American raw material will produce in the commercial nurseries satisfactory blocks of trees and plants. No decision was announced by the Federal Horticultural Board, and your committee is unable to advise you further.

After the hearing your committee had an opportunity of discussing with Dr. Galloway of the Department of Agriculture and Dr. Orton of the Bureau of Plant Industry the suggestion made by us that the Department should undertake to solve our problems. We are glad to say that both gentlemen expressed themselves in favor of such action, and felt that it was an entirely proper work for the Department to undertake. Dr. Orton told us that the matter was already under consideration by Dr. Taylor, head of the Bureau of Plant Industry, and that the Department had certain land which he thought was well located and available for such experiments.

Dr. Orton suggested that our Association confer with Dr. Taylor as soon as possible and present to him a state-

ment of our difficulties and the problems that we want to have them work out.

Your committee would therefore suggest the appointment of a special committee to take up this subject with the Bureau of Plant Industry, and that such committee should be composed of men who are thoroughly conversant with the difficulties and problems now confronting not only the men who grow fruit trees, but those whose business will be seriously hampered by the exclusion of plants and ornamentals. It should be a committee conversant with all the problems connected with the production of our raw materials, and be prepared to go before the Bureau of Plant Industry with a definite list of experiments which we would like to have undertaken by that Department.

Your legislative committee for the coming year should necessarily keep in touch with the Federal Horticultural Board, particularly as to the matters under discussion at the May hearing, and should also keep watch of Federal and State Legislation. Your committee has had very little work to do on matters of State Legislation during the past year, and will leave that subject for the report of your counsel and secretary, Mr. Smith.

In the fall of 1917 I found that my duties as Chairman of the District Exemption Board and my business made it necessary for me to tender my resignation as Chairman of your Legislative Committee, but I then said that I would take care of the work of the committee so far as the conference with Prof. Sanders' committee was concerned. In April I was asked by Vice President Mayhew to take charge of the hearing at Washington May 28th, and was glad to find that I was able to do so. I am handing you this report as that of the Legislative Committee and as temporary chairman thereof.

SERVICE FLAG AT CONVENTION

The "Baby Ramblers" hung a service flag at the Nurserymen's convention in honor of six of their members who are now in the service. Some are already "Over there."

The stars were for:

Paul Fortmuller.
Albert F. Meehan.
Clarence Perkins.
M. W. Bryant.
Wm. Flemmer, Jr.
Clay Stark.

They also displayed on a table, six pot grown plants, in full bloom, of pink Baby Rambler Roses, in honor of their absent Brothers.

MARKET DEVELOPMENT

Discussion of the Movement at the Chicago Convention
(MR. PYLE IN THE CHAIR.)

Gentlemen, as we finished that song, and standing in front of this beautiful rose Columbia, I was deeply impressed with the real significance of the term, "The Land of the Free," and it is this thought, that I believe that nurserymen, who are more accustomed than men in any other line of business to working under the open sky, stand for more than anything else, and that is freedom of choice. Americans do not like to be forced to do something that is definitely against their conviction, and it seems to me that just one word of explanation is due you, further making clear the reasons for the convictions on the part of the Publicity Committee, for promoting the establishment or the organization of a subscribers' movement that should be distinct and separate, for very good reasons, from the American Association of Nurserymen.

As I have said, Americans do not like to be forced to do things beyond their convictions, and this is especially true of nurserymen. Some men have thought and felt that it would be much better if this were made a matter of assessment, and yet that feeling to which I refer convinced your Publicity Committee that this movement must be started, at least, as a voluntary movement, and for that reason it has been so started and established by the organization, as one of the speakers will presently show you.

I have heard, since coming here, of men who have traveled, at increased expense, as we all know, over a thousand miles who said they would not have left home had it not been for the subject of "Market Development" that was to be considered at this meeting, and I believe that is true of a very great number of people who are here. The nurserymen realize what a tremendously big subject it is and how full of significance for them. That being the case, you will realize that it is entirely too big a subject for one person to present, and for that reason I am going to call on a number of different persons—each briefly, I trust—to present this subject to you. And first I will call on Mr. J. Edward Moon, who will briefly present the movement to you as it was first started.

MR. J. EDWARD MOON: This Market Development Idea, as Mr. Atkins has said, has grown out of the public movement, and nurserymen have been hearing it at our conventions for a number of years, until some of us thought it ought to take some definite, tangible shape and that we ought to get to work at it instead of talking about it. Now then, just for a moment let me review the possibilities of it.

All of us know that in every community from which we come there are numerous houses unplanted, or insufficiently planted. We have an abiding opinion that if those people had attractive lawns they would be more happy; we know their real estate would be enhanced; we know the community would be benefited, but we somehow have not sufficiently impressed the advantages of our products upon the community to have created that irresistible desire for them. Those of us who grow fruits know that in many parts of the country there are vacant spaces where fruits ought to be growing, particularly they ought to be producing food this summer. The field and the possibilities are indefinite.

We can take the Victrola as an instance. There is a sort of native desire for music in every one, a sort of latent desire, but when it can be had as easily as the Victrola has made it possible, the Victrola becomes essential. The difference between essentials and non-essentials is the man. We are finding now to some extent that we are by some being classed as non-essentials; we are not ready to believe that ourselves. In order to bring this great work about, some organization is necessary. We want to make America beautiful and we want to make America fruitful. Nobody could have greater aspirations, and nobody has it in their power to do more than this body of American nurserymen. To accomplish that the nurserymen's organization for Market Development has sprung into existence.

I would point out first that it was thought best to make a separate organization of it; that the subscribers who contributed their money for this particular purpose might control the expenditure through their chosen directors. That organization has been effected. Sixteen gentlemen have been chosen, I understand

they have not yet organized and some of the speakers after me will tell you who they are.

Those sixteen men have been chosen, eight from the different sections in the United States and eight at large. They will organize and be ready to receive subscriptions. The original form of subscription as announced in the paper, is somewhat changed and it will be a certificate of membership, or a stock allotment having a face value of \$100, issued payable in installments of \$20 each over a period of five years. Just how that will work out will be developed by the directors.

Now, then, the idea seems to be prevalent in the minds of some, that we hand this sum of money over to a board of directors and that they will proceed to pour this out through the Saturday Evening Post or some other nationally circulated magazine. I want right here to get that idea out of anybody's head, if it is there, for the nationally circulated magazines are probably one of the last avenues to use in the expenditure of this fund. They have a lot of waste circulation, they have a lot of circulation among city inhabitants. Your directors will weigh those matters carefully before placing any such advertising.

The avenues of publicity that have tentatively appealed to the directors most in connection with this movement are somewhat as follows: There are tremendous possibilities in the movies. Any individual nursery firm could likely not stage a movie film, but unitedly we can do it if we can get those circulating up and down the land, showing the fruit tree in the back yard, its growth, the flower opening, the ripening and reddening of the fruit seeing the children enjoying the flowers, showing the joy that the fruits and flowers give the community and we have got there a story of real personal interest. We can show flower borders from the early spring until frost comes, we can show a never ending succession of bloom and the enjoyment that the family gets from it. That is one of the many avenues. Another is the possibility of lectures. Every grange, every farmers' club, every garden club, every agricultural or horticultural organization of any kind is always glad to have lectures, illustrated or not. We hope to be able to arrange such lectures, and either by establishing a circuit, or in some way that the board of directors will devise, they can be sent out, always with a message that these products can be had from the nurserymen of America.

Then a great possibility lies with an opportunity to get into the press, news articles; news articles that tell more about fruit trees and how to grow them and the necessity of planting more, the value of fruits, the necessity of eating more fruits; news articles that tell us the values of both trees and ornamentals. These, if properly conducted and syndicated, can undoubtedly be gotten into the American press so that we can reach millions of people that we have not heretofore reached. Other possibilities are through the schools. Just how we can reach the schools has not yet been determined. In fact, none of these methods have been determined up, but there undoubtedly is a way of reaching the public through schools and school gardens, through arboreta and parks and innumerable other channels.

Now your committee and board of directors will probably be working out this plan through some person. No one has been chosen, no one is in mind and nobody has any favorites, it will undoubtedly engage some one of national merchandising experience, preferably not an advertising agency, who can get these lectures, who can stage these films, who can edit and distribute these news articles, who can arrange exhibits and demonstrations that can be taken to expositions and to fairs. Lastly, he may find it desirable to use some publicity through the magazines, but as I said, the impression seems to be that that is one of the last avenues. Now I hope that in this talk I have opened up to you a vision of the possibilities of this thing. It grows on us, it is infinite. America is our market, to make it more beautiful and to make it more fruitful is our ambition. (Applause.)

THE CHAIRMAN: No doubt there are a number of men here who would like to be heard on this question, but in view of the fact that the hour is fast growing later, we are confining the remarks mainly to the members of the board of directors who have been selected. However, we should make one exception to

that, as it is possible that your president may not be able to be here during the entire session. He has very definite convictions on this subject, and I think an opportunity should be given to you to hear Mr. Mayhew at this time.

MR. J. R. MAYHEW: I have been just a little too busy during these sessions to give very much thought to the work of the Market Development Committee. But as I look over this list of sixteen names, if I had any doubts in the world in my mind, those doubts would be dispelled. Personally, as a subscriber to this fund, as one who believes in its efficacy, I am more than willing to contribute the amount that I am able to contribute to this splendid body of men and ask no questions. I think you might look the United States over and you would not find an abler, fairer body of men than those that have been gotten together for your directors for this year, and because that is true, you are not going to make any mistake. I said in the initial meeting, or in the pre-meeting of this committee, that I believed the time was ripe now to go ahead with this work. I believe that that is the committee's plan, notwithstanding the fact that the world is being devastated by war, I think we must not lose sight of the fact that we must keep the home fires burning. The aim of this committee is to create better markets and bigger markets and more markets and I believe that any one of us can take on just a little more work. I think any of us can take on a few more orders and I hope to see the work progress from the beginning. I am not going to take any more of your time; I have spoken many times during this session. I believe most heartily in the work and, best of all, I believe most heartily in the men that are going to be responsible for the work.

THE CHAIRMAN: When coming to the platform I referred to a man who had stated to me that he had come here particularly on account of this movement and I think it is due you that you should hear from him. Mr. O. Joe Howard, of North Carolina.

MR. HOWARD: I believe in this proposition. I have been working at the publicity game in our Southern Association for some two or three years and we feel that we have accomplished some things down there. I want to relate something that happened down in my state the summer before last. We undertook to put on a landscape department and got a set of slides and a lantern and one of these machines made up here at Detroit and sent a landscape architect to lecture on landscape gardening with one of our best salesmen. I want to say this to show how I believe this movement can help the man who works through agents particularly. These men went out doing this lecture work and had time the next day to take orders and in some places worked after the lecture to take orders. At one town, I remember, a representative of another nursery came into our office after the year's trip was over and inquired of us when we were going to send out this lecturer again. Well, I thought he had his gall with him, but just that thing happened, he was reaping the benefit of our work, we were helping our competitor over there at Richmond. But I am just simply trying to show you that this publicity work that we did with our landscape garden department was helping the other fellow. That is my only plea.

I believe that this publicity work will do another thing for the agency man. We all know that book agents and fruit tree agents are very high class men. They stand at the very top of the profession. I believe that by making this thing national and letting the public know that we nurserymen are on our jobs and are men worth while, that it will be easier for us agency men to get a higher class of representatives. You may not need that, but we do. I will be perfectly frank with you. There is not an agency man here that will not agree with that statement. We all have some good men, but I am sorry to say that nearly all nurserymen know of some scalawags. We need this thing because it puts the thing on a higher plane. Above all things we need the spirit of cooperation among nurserymen that will be developed by this cooperative movement. I believe it will wipe away a great many difficulties. We will stop knocking each other and boost our business and help everybody else along.

THE CHAIRMAN: There is in the hall a man who I believe will raise his subscription ten times the amount he first subscribed if he felt that every man was going to put in the same proportion and I would call on Mr. W. H. Wyman.

MR. W. H. WYMAN: Mr. President and gentlemen of the Association: I was not expecting to say anything on this subject. It is a big subject, it is a broad subject and I may not keep very close to the mark if I attempt to say what is in my mind. Because this is a broad proposition I believe in it if it is taken up in a broad way and only if it is taken up in a broad way. What we need to do is to create hunger for our business, for all our goods, to create an appetite for them. All

other businesses are doing that which creates an appetite for their wares. It is possible for us to do the same thing. We are told that by experts who are familiar with putting over tricks of this kind. It is only a question as to whether or not we are willing to enter into this arrangement co-operatively, in a large way, commensurate with our ability. It is possible for us, if we only think so, to raise a good sum of money. I am willing, as the president has said, though I have given him no authority for saying it, I am willing to subscribe a thousand dollars to this fund if we make this fund a hundred thousand dollars for the first years. (Applause.) And I believe it can be easily done if we go at it, if we want to do it, and I can show you how it can be done very easily if you are willing as a body to cooperate in this movement. It should not be done by two or three men, it should not be done by a few, every last one of us in proportion to our business. Every one of us will get benefitted in proportion to our business. Every one of us will get benefit from it. It is not because I expect to benefit at your expense, nothing of the kind. We will all be benefitted if we launch a large movement that shall create for our wares a much larger demand.

I do not believe that the time is ripe now to launch a movement of this kind. I think that we have got one thing before us that we must do, when that thing is done, then let it be in shape, let us get in shape to do the thing when the proper time comes. I should like, if I might be allowed, I should like to get an expression from the gentlemen here as to how many of you are in sympathy with this movement. Without making a pledge of one cent, I should like to know how many men are in sympathy with a movement of this kind. I always like to know what the crowd is that I am talking to, where I stand, and may I ask the men who are in sympathy with this movement to raise their hand?

THE CHAIRMAN: A standing vote is asked for.

(There was a unanimous rising of the members present.)

MR. WYMAN: That, Mr. Chairman, is very gratifying to me. Now I think all we need is to be shown how we can do this. I do not want to take time, we have a speaker here this morning who is going to show us many things, I think, but I am going to show you just one way by means of which we can in an equitable manner raise \$100,000. Last winter at our New England Associational meeting this matter was brought up and in that meeting it was concluded that the business of the nurserymen of this country amounted to twenty million dollars annually. We wanted to raise \$100,000 and we pledged ourselves there to raise our proportional part of \$100,000 if this organization would take it upon itself to raise that amount. You can depend upon New England to raise its quota if you will raise the rest. How shall we do this? Now let us be honest with ourselves here, as we were honest with ourselves there.

We passed around slips of paper in that meeting and asked every man, without signing his name, to put on the amount of business he did that year. We did that and I forget the amount that was shown in New England, but we could do that thing here now. At the rate that our business in New England footed up, we concluded that at least twenty million dollars was only a fair figure for the United States. Now supposing we should be willing to assess ourselves one half of one per cent for five years of total of our business, how easily we could raise \$100,000 and none of us would feel it. We can take that out of our advertising and we would have this \$100,000. I for one am willing to assess myself, to unite with you in making a voluntary assessment of one half of one per cent.

Now that would not be fair, I could hear some of you saying. Some of you gentlemen are doing a large business in a retail way and it may be that they are doing a million dollars' worth of business and it would not be fair to assess them in that way, because their profits are not so large in the aggregate as some concerns doing less business who are having less overhead expense. I think that is true, and I would make a limit, that no concern should be assessed for more than a certain sum. I do not know how that could be worked out, I do not know just where to put that figure, but I would say, let us assess ourselves some amount, I do not care whether it is one half of one per cent, or one fifth of one per cent, or whatever per cent it is, which in the judgment of this body shall seem advisable. Let us assess ourselves and then the burden will fit equally upon every man's shoulder and everybody will give in proportion to his capacity, his ability or his business capacity.

Now, I believe something of this kind can be worked out. I am in favor of it, but I am not in favor of doing this thing this year. It will take some little time to get this machinery in motion. When we have whipped the Kaiser then we can go ahead and do this thing, but we will first whip the Kaiser. (Applause.) But

let us now get in shape to do the next thing, for it may be that the Kaiser will be whipped before some of us think he is going to be whipped and we want to be ready for this other proposition. That is a thing it seems to me, that we ought to do. I do not believe in this voluntary subscription, only as we voluntarily vote to subscribe a certain per cent. I think in that way we can get it equitably adjusted. I leave this for your consideration. I believe it is the most feasible way, it is the most equitable and it is the easiest way to get it, and I have authority from the New England Nurserymen's Association to say that when you get up to the \$100,000 mark, we will do our part. (Applause.)

THE CHAIRMAN: Mr. Wyman has shown us very clearly where his heart is, it is right with this movement and you have also learned that he is one of the sixteen directors that have been selected to do the right thing in connection with this movement. He has told you that this is the best way out of it. I think everybody probably feels there is much in what he says. There is a question in the minds of some whether it is the best way to enter it and get it started, because there are some things we cannot do until we get the first great thing off our hands, he is right when he says we must whip the Kaiser first. In the same way we must be prepared to pull off this job. We must whip this subject into shape and it is going to take some time to do it and this committee is on the job. May I call on Mr. Harrison, who has given a good round subscription and I believe he is prepared to do more.

MR. ORLANDO HARRISON: I was asked this morning why our firm subscribed \$500 a year for five years. I can answer in a moment. I authorized that myself as a matter of investment. I did so from experience. The past twenty-five years we have spent a quarter of a million dollars in advertising and I thought if we could make cooperative advertising go, I believe we could save money, so that was just simply as a matter of economy, not as a matter of expenditure, but as a matter of economy, getting together. I believe if we can get together, spend this money together, we can make our money go further. One of the greatest cries is today, "Our money won't reach." But let us get together, give it to these 16 heads, let them use their best judgment and see if we cannot make it reach. I believe this is a good thing now. Mr. Wyman does not know whether he wants to start it at once, or whether he wants to wait 12 months or 5 years, that is up to the committee, but we are going to depend upon the committee. I believe the American Association of Nurserymen should take some action and should take action today. The trouble is, we have postponed until we have got to a point when we are driven to do something. I believe that a great many nurserymen have not made any money for five years. Is it not time to get at it, do something, get together and try to earn a few dollars for ourselves? Somebody spoke about licking the Kaiser. Yes, that is the first aim, but, gentlemen, we have got to have something to lick the Kaiser with. Let us get together, unite, determine on some plan of making some money and help lick the Kaiser and at the same time save our families. (Applause.)

THE CHAIRMAN: There is a former president of this association from whom I know we will all be glad to hear.

MR. JOHN WATSON: I feel a great responsibility in saying just a few words to you gentlemen, because the prosperity of the nursery trade in America and very largely the prosperity of America itself, rests in your hands and is determined by the decisions that you make on this and other questions. I feel further responsibility because I am in a peculiar position. I believe heartily in this thing, I think it is the finest thing that the nurserymen of America have ever attempted. I believe in it absolutely and yet my judgment may not be good and yet my bread and butter absolutely depends on it. Now there is not a dollar of profit that can come to me from the success of this undertaking that does not have to come first in your hands. I am a wholesaler, my trade comes from many of you gentlemen who are here, I am talking to my customers. There is not a dollar in the nursery business that does not represent dollars that you have already made and then through you may go further into my hands. The firm I have the honor to represent have subscribed \$250, I wish it were a thousand dollars. That \$250 subscription is \$250 more than the Princeton Nursery Company has ever made in the nursery trade. We are young, we are starting, this is one of the big things that is going to help us get along. I have heard several suggestions made by previous speakers. One is that we should have an assessment falling equally on all. Yes, that is true, that would be the equitable way and that would be the fair way and that I think is the way in which this thing will finally become operative. First, we know there is no ability to levy a tax, or that there is no power to collect taxes, but I believe that the nurserymen of the United States, the nurserymen of this association are going to be big

and broad enough to realize that their subscriptions to this fund should be in proportion to the business that they do. and I believe that that matter can very safely be left to the board of directors and to the nurserymen themselves to adjust. Of course I shall not mention the character who is called forth on us by the previous speakers, he is not mentioned in polite society these days, but when we say this is not the time to do this and that we must put it off until the time that this character is disposed of, it is a mistake.

Now, gentlemen, there is not money enough, or brains enough, or anything to be done within six months or within a year that can affect our sales. In the first place, if a merchandizing expert is called in to prescribe for your business, he wants to know what your stock is, he wants to know what your customers are, what territory you cover, the condition of your bank book. Now, when your 16 directors get together to consider this question and when they have, as they should have, the advice of merchandizing experts, who have their advice to sell, remember that they are going to consider not the business of one firm, but they must consider the business of, we hope, 500 to 800 firms scattered all over the United States and it is going to be a big problem to figure out a campaign which is going to cover this whole country and fall equitably on all of you. It can be done, but it is a long, hard study, it is going to take, in my opinion, fully a year to get our money raised and get a campaign mapped out. We must not expect immediate returns on this. The effect is going to be cumulative. It may be two, three, four, five years before we get returns but I honestly believe that there is not another way in which nurserymen could spend \$50,000 or \$100,000 that would bring them better or finer results than this will.

You are going to do that, gentlemen, you are going to raise that sum of money, you are going to cooperate. We have made the mistake in the past years of putting the most wonderful energy into competing with each other for the same orders, in competing on a price basis for the same business, but we have not done anything in a big co-operative way to develop a demand. That is what this Market Development should do. I want to see that \$50,000 raised right in this meeting. Now is the accepted time.

THE CHAIRMAN: Mr. Watson has said the word, now is the accepted time. Gentlemen, the opportunity will be offered for any one to speak who has an appropriation to make, who has a subscription to offer, but before throwing the meeting open for that kind of speeches, I am going to call on Mr. Cashman, who will introduce that part of the subject.

MR. M. R. CASHMAN: Gentlemen, I did not know that I was going to talk on this matter until just prior to this meeting, but I think in justice to my firm and any other nursery firm engaged in the retail end of this business that some discussion should be made to endeavor to find out, if possible where we are going to benefit from it, where we are going to benefit by a publicity campaign. I have been making a study insofar as my capacity will permit me, to enlarge my field of observations, to put into it a more concerted, effective action that would result of course in more business. I have studied the problem from various angles and I have arrived at several conclusions that I think have been of great value to my concern and has resulted in successful results from the efforts that they have made. First, to build up the quality and the character of my representatives and with them to make a concerted, united action for business. There never has been in the history of this world a greater illustration made of one concerted and united action than there has been made during the past four years and which has cost the civilized world millions of lives in blood. Concerted action and united cooperation have made it possible for a very small portion of this earth to almost submerge the entire world. Just think of it. There is not a man in this room that before this war thought it would be possible for three little nations to combat so successfully and so disastrously the entire wealth and man power of the earth. But what is it? Is it a superiority of brains? Is it a superiority of government? Oh, no; it has been demonstrated clearly to you and me, that concerted action and cooperation have continued this war to the present time, until we are beginning to tremble for our future.

Now, then, we are building for concerted action ourselves and we are going to do and accomplish the thing that should have been done under concerted action and could have been done in a shorter time. Here we are, a body of nurserymen scattered over the length and breadth of this land, each one of us in our own way seeking out our methods, putting them into practice, getting business to support our families and to pay our debts, and up until last year there has never been, so far as I know, any spirit of cooperation or any spirit of concerted action coming from this

body or any section of this body that happened to meet in other parts of the country. But I notice, and I am sure you will all observe, that there is a growing feeling of cooperation, a growing feeling of friendliness, a growing feeling that our business is in common and that your success is mine and that by the establishment of our business on sound, sane, honest principles and by supplying those to the world, that we can take it up and build it up honestly from our plan and force, if you please, the public to recognize us as we really should be now.

Then going back to publicity. I am a retailer pure and simple and I know there are other men in this audience who undoubtedly will begin to say, "That order you gave Cashman, you sent an experienced high class salesman with all kinds of persuasive arguments to get that order and he gets it through," and he builds up other orders in that one interview and that publicity really does not enter in. Now, I used to have those ideas myself. I used to think that that was straight goods, but I am beginning to get over that. I have gotten entirely over it. I find that there must be a community interest excited in anything if you are going to make a demand for any product. That has been demonstrated so clearly and effectively to me in all other lines of business that I really think it a waste of time to debate it, because a community interest and a market must be built up by agitation and that agitation today must be by keeping before the eyes of the public or the consumer the particular article or product in which you are interested, and the fact that no one wants to manufacture non-essentials, have been made into wonderful businesses today, is a great demonstration to me that any business can be made the same.

Now there is not, so far as I know, maybe I am prejudiced, but I do not believe there is a business on the face of this earth that is so essential to civilization as the nursery business. There is no disputing the fact that the nursery business today is the most essential on God's earth, unless it is the struggle that we are now engaged in, but it only emphasizes one thing that we must do, we must keep, as our president said, the home fires burning. We are today facing a period of famine, so far as fruit in this country or in European countries is concerned. The time is approaching when this government must give its attention to the production of more fruit, more thought must be given to this, and I am sure you all know that the human body, in order to conserve life, must have a certain amount of fruit or fruit juices. Our population has been growing while the fruit crops have been decreasing. Old orchards are dying out and are not being replaced because of the fact that farmers are encouraged to put that ground into raising cereals. The high prices of everything now, including meats and cereals, encourages the farmers to pay no attention to raising fruit, consequently we are going to face the serious condition in our country which will mean a fruit famine and which will mean that the government must take hold of the matter of planting more trees and encourage the planting of more fruits throughout the land.

On the other hand, the vast wealth that has been made during the past generation has brought about a condition of people wanting to enjoy that wealth and is there any greater way that any man can enjoy his life after he has made a sufficient amount to keep him than to live in a beautiful home that has beautiful surroundings, and the surroundings, you will agree with me, make the beautiful home, consequently there is a demand that has not been awakened, at least not by the nurserymen of this country. We have been agitating in our small way, but there has not been a concerted action to bring this thing out and flash it on the screen before the wealth of this country that they can secure what their heart's desire really is. You know that by reminding a person of what they really need, you can awaken a desire and create a need, and that is what we are interested in and starting this movement for. In my business, if there is any little thing that I think will increase the sales of my agents five per cent or two per cent, I am willing to invest \$100 or \$200 or \$500 in it. I have put into the man's hand the very best outfit that money can buy. If he is incapable and has not the capacity to handle it, I do not want him. Another thing, I have a policy that if a man cannot earn what I consider four times what an ordinary man is worth, I do not want him on my force. I tell him that so and so is in need of men, I am sure you can get a good place over there. I am looking for high class men, fewer of them, but men who can go out and get the business, and I can prove to you that that policy has been successful.

Now, then, how is the matter of publicity going to affect me, with my high class men, who go out to secure orders and who through personal persuasion secure the order? Why, bless your soul, we cultivate the field before we sow the seed. Always a field not properly cultivated will not produce an abundant crop.

It is the cultivation of the field that we are interested in, and after the business, or a desire for our product is created, then it is up to me to get my share.

I am not afraid of the other fellow. If I am, I am not worthy of the name. I should go into a business where I can work with my equals. But it is the cultivation of the field, the creation of the demand that we are interested in, and in accepting a position on this executive board I had that in mind, and I am here to say to my retail friends, that so far as I am concerned, and I can raise my voice higher than any other man in the room that I know of, that I will not permit without making some sort of a struggle, a dollar of this money that goes into this treasury to be expended where it will not benefit us all alike. That is what you are interested in, that is what I am interested in. We are interested in getting this thing down to an equitable basis where we can all say that we have had an opportunity to share in the harvest that has been created and we are going to share in it, gentlemen, just as true as you are sitting here, if this campaign is put across, we are going to share in it and I am going to invest in it and my initial investment is only an invitation to my neighbor to come in with me. We do not want to make it so high that it is going to scare the little fellow. Put it where he can reach and where he can say he has had an opportunity to come in and share with this development idea. We are going to map out the campaign after we find that we are all united. We did not want to do anything when we were not united, but I want to tell you, it has made wonderful progress and I want to congratulate the men that have started it. Don't you know, somebody is always responsible for some good idea that has made wealth for the world and usually it is the fellow who starts the good idea, or the wonderful, valuable idea that gets the least out of it? That has been the history of the world. Nevertheless, it has been put up here right in front of us and if we fail to take advantage of it, don't let us blame any one else afterwards and don't let us put off until tomorrow what we can do today.

This committee is not going to spend your money simply because you have made an appropriation, or a contribution, or made a promise to do so. I made my promise several months ago and it will probably be several months, probably a year, maybe longer, before there will be a dollar of that money called for, but you can rest assured that in the hands of this committee, when there is any money called for, that it is going to be put into a work that they think will return 100 times its original amount in value.

I am very sincere in these matters and I would like to bring about a correction of all the evils in any business I am associated with. I want to see my friends and competitors enjoy with me the prosperity that I can get out of business that we are engaged in. So let us not haggle over contributing a very small percentage of our yearly business into the creation of more business, which again will result in the creation of more business and before we leave this room I think every man here should stand on his feet and have his say as to what he thinks about it and the best thing that any man can say is, "Put me down for \$100," or "\$250 a year." If it is in order, Mr. Chairman, we have spent considerable time on this, we have gone over it, if there are any questions to be asked we can answer them, but if it is in order I am going to ask Henry Chase to take his pencil and come to this blackboard and indicate the amount and name of any concern who is not already in it, that wants to join with us in this movement.

MR. ATKIN: This is not a question of the heart, it is a question of dollars and cents, and it is only dollars and cents that create further dollars and cents. I think the time is here for every one of you to get into your mind that this is the moment to apply the Golden Rule, instead of the rule of gold in helping each other. In selling nursery products, the party that buys them ordinarily does not buy them for sentimental reasons. A few days ago a man came into my office and said to me, "Mr. Atkins, can you remember about five years ago you sold me about \$600 worth of your nursery products? I said I did. He said, 'I sold my house the other day. Those \$600 made me \$5,000.'" So you see, Gentlemen, it is not always the love of plants and flowers that influence people when they buy our products. Many people buy them because they know it is a good thing; they are going to improve their grounds, in addition to having the pleasure and inspiration coming from beautiful surroundings. I think, gentlemen, that there is not a nurseryman in this country today that has vision beyond the present, but what realizes that advertising, or publicity is the power behind their business. That is my positive thought, it is the power behind their business. Now, gentlemen, I have worked on that committee and this committee has this power to offer to you, and I will further augment this power by making our subscription

\$500 a year, providing of course we are going to have that \$50,000; and \$1,000 a year, providing that we have \$100,000, and \$2500, provided we have \$200,000. That is our position.

MARKET DEVELOPMENT MEETING

The subscribers to the Market Development Fund held a meeting at the Hotel Sherman, Chicago, on Tuesday afternoon, June 25th, for the purpose of forming a permanent organization.

Previous to the meeting, the subscribers had voted by mail for eight directors, and eight directors at large.

At the meeting on Tuesday, a constitution was prepared and adopted, as were also a set of By-laws.

The sixteen directors elected were:—John Watson, Robert Pyle, O. Joe Howard, E. S. Weleh, W. H. Wyman, William Ilgenfritz, M. J. Cashman, C. C. Mayhew, Geo. C. Roeding, Edward Moon, F. L. Atkins, Paul C. Stark, W. C. Harrison, Thomas B. Meehan, Henry Chase, and J. B. Pilkington. Later, Mr. Wyman resigned, and C. R. Burr was elected to succeed him.

At a meeting of the Directors, an executive Committee was elected, consisting of the following members: John Watson, Robert Pyle, C. R. Burr, O. Joe Howard, and E. S. Weleh.

The Executive Committee will at once take steps to incorporate the Organization.

Following are the subscriptions to date:

List of Subscribers for Market Development Fund

NEW ENGLAND SECTION

NEW HAMPSHIRE

Chase Co., Benj., Derry\$200.00

MASSACHUSETTS

Adams Nursery Co., J. W., Springfield\$100.00
Bay State Nurseries, North Abington 500.00
Brandley, James, Walpole 25.00
Breck-Robinson Nursery Co., Lexington 100.00
Breed, E. W., Clinton 25.00
Heurlin, Julius, So. Braintree 50.00
Framingham Nurseries, Framingham 100.00
Kelsey, Harlan P., Salem 250.00
Littlefield & Wyman, No. Abington 20.00
McManmon, J. J., Lowell 25.00
Massachusetts Nurserymen's Association 100.00
New England Nursery Co., Bedford 25.00
Smith, Curtis Nye, Boston 50.00
Thurlow's Sons, T. C., West Newbury 100.00
Wright, Geo. B., Chelmsford 25.00

RHODE ISLAND

Clarke, Daniel, Fiskeville 50.00
Vanicek, V. A., Newport 100.00
Burr & Co., C. R., Manchester 250.00

CONNECTICUT

Elm City Nursery Co., New Haven 100.00
Hunt & Co., W. W., Hartford 25.00
Pierson Corporation, A. N., Cromwell 100.00
North-Eastern Forestry Co., Cheshire 30.00
Connecticut Nurserymen's Association 50.00

MIDDLE ATLANTIC SECTION

PENNSYLVANIA

Andorra Nurseries, Chestnut Hill\$250.00
Barr, B. F., Lancaster 25.00
Conard & Jones Co., West Grove 250.00
Farr, B. H., Wyomissing 25.00
Hoopes Bro. & Thomas Co., West Chester 500.00
Jones, J. F., Lancaster 10.00
Keystone State Nursery Co., Pittsburgh 25.00
McFarland Co., J. Horace, Harrisburg 250.00
McFarland Publicity Service, Harrisburg 20.00
Meehan Co., Thomas B., Dresher 250.00
Moon Co., William H., Morrisville 500.00
Muller, Adolf, Norristown 100.00

National Nurseryman, Hatboro 50.00
Pennsylvania Nursery Co., Girard 25.00
Rakestraw-Pyle Co., Kennett Square 50.00
Root, J. W., Manheim 10.00
Stein, Geo. E., Wrightsville 5.00
Thomas & Sons, Jos. W., King-of-Prussia 25.00
Wohlert, A. E., Narberth 25.00

MARYLAND

Harrison & Sons, J. G., Berlin\$500.00
Peters, Charles M., Saulsbury 20.00

DELAWARE

Bunting's Nurseries, Selbyville\$ 10.00

NEW JERSEY

Barrett & Son, Benj., Blue Anchor\$ 5.00
Bobbink & Atkins, Rutherford 250.00
F. & F. Nurseries, Springfield 500.00
Lovett, J. T., Little Silver 100.00
McColgan Nurseries, Red Bank 10.00
Momm's Sons Co., C., Irvington 10.00
Plainfield Nurseries, Scotch Plains 25.00
Princeton Nurseries, Princeton 500.00
Roehrs Co., Julius, Rutherford 100.00
Horner, Harold, Mt. Holly 10.00

NEW YORK

American Nurseryman, Rochester 10.00
Charles Advertising Service, The, New York City .. 100.00
Dansville Wholesale Nurserymen, Dansville 50.00
Harris, S. G., Tarrytown 50.00
Hicks & Son, Isaac, Westbury 500.00
Jackson & Perkins Co., Newark 500.00
McHutchison & Co., New York 500.00
Maloney Bros. & Wells Co., Dansville 100.00
Rouse & Sons, Irving, Rochester 100.00
Smith Co., W. & T., Geneva 250.00
Swan River Nurseries, Patchogue 35.00
Taylor Nur. Co., H. S., Rochester 100.00
Williams, Miss Rose, Newark 10.00
Doubleday, Page & Co., Garden City 250.00

VIRGINIA

Hood & Co., W. T., Richmond 20.00

CENTRAL SECTION

MICHIGAN

Baldwin, O. A. D., Bridgman 100.00
Greening Nursery Co., Monroe 250.00
Ilgenfritz' Sons Co., I. E., Monroe 250.00
Morse Co., A. B., St. Joseph 25.00
Mutual Nurseries, Monroe 100.00

ILLINOIS

Augustine & Co., Normal\$ 25.00
Aurora Nursery Co., Aurora 50.00
Beaudry Nursery Co., W. E., Chicago 25.00
Bock, Henry, Naperville 25.00
Bryant & Son, A., Princeton 50.00
Corn Belt N. & F. Association, Bloomington 50.00
Cottas Nursery and Orchard Co., Rockford 20.00
Critchfield Advertising Co., Chicago 100.00
Hill Nursery Co., D., Dundee 100.00
Ingels, Irvin, Lafayette 25.00
Klehm's Nurseries, Arlington Heights 50.00
Leesley Brothers, Chicago 50.00
Naperville Nurseries, Naperville 125.00
Saddler Brothers, Bloomington 50.00
Nelson & Sons Co., Swain, Chicago 150.00
Prescott, C. W., Marengo 10.00
Uecke, Robert C., Harvard 10.00
Washburn & Son, A., Bloomington 25.00

KENTUCKY

Hillenmeyer & Son, H F., Lexington\$ 25.00
Willadean Nurseries, Sparta 100.00

INDIANA

Hobbs & Sons, C. M., Bridgeport\$100.00
Home Nurseries, The Haws, Terre Haute 100.00
Reed, W. C., Vincennes 100.00
Simpson & Sons, H. M., Vincennes 100.00

OHIO

Baird & Hall Nursery, Troy\$ 15.00
Bohlender & Son, Peter, Tippecanoe City 50.00
Cole, W. B., Painesville 100.00
Ernst, Charles, Eaton 50.00
Kohankie, Martin, Painesville 50.00
McBeth, Thomas A., Springfield 5.00
Storrs & Harrison Co., Painesville 150.00

WESTERN SECTION

KANSAS

Bernardin, E. P., Parsons	\$ 50.00
Chanute Nurseries, Chanute	10.00
Holsinger Brothers, Rosedale	50.00
Mount Hope Nurseries, Lawrence	50.00
Willis & Co., A., Ottawa	50.00

MISSOURI

Peyton, T. R., Boonville	10.00
Kelsey Nur. Co., St. Joseph	50.00
Stark Brothers, Louisiana	500.00
Westover Nursery Co., Clayton	50.00
Weber & Sons Nursery Co., H. J., Nursery	100.00

IOWA

Baumhoffer, A. J., Cedar Rapids	10.00
Des Moines Nur Co., Des Moines	50.00
Ferris, Earl, Hampton	100.00
Hill, J. W., Des Moines	50.00
Mount Arbor Nurseries, Shenandoah	250.00
Shenandoah Nurseries, Shenandoah	250.00
Sherman Nursery Co., Charles City	150.00
Welch, E. S., Shenandoah	250.00

NEBRASKA

Backes, H. J., Humphrey	\$ 20.00
Harrison Nursery Co., York	100.00
Marshall Bros. Co., Arlington	100.00
Sonderegger Nurseries	100.00
Youngers, Peter, Geneva	20.00

NORTHWESTERN SECTION

MINNESOTA

Brand Nursery Co., Faribault	\$ 50.00
Clinton Falls Nursery Co., Owatonna	150.00
Deerfield Nursery Co., Medford	—*
Howard Lake and Victor N. Co., Howard Lake	—*
Jewell Nursery Co., Lake City	150.00
Pfaender, William, New Ulm	—*
Rose Hill Nursery Co., Minneapolis	50.00
St. Cloud Nur. Co., St. Cloud	100.00
Tolleson Nursery Co., Lake City	25.00
Wedge Nursery Co., Albert Lea	150.00

NORTH DAKOTA

Hankinson Nursery Co., Hankinson	\$ 50.00
Northwest Nursery Co., Valley City	50.00

SOUTH DAKOTA

Will & Company, Oscar H., Bismarck	\$ 25.00
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SASK., CANADA

Prairie Nursery Co., Estevan	100.00
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SOUTH-EASTERN SECTION

MISSISSIPPI

U. S. Nursery Co., Roseacres	\$100.00
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TENNESSEE

Cumberland Nurseries, Winchester	\$ 50.00
Southern Nur. Co., Winchester	20.00

NORTH CAROLINA

Lindley Nursery Co., J. Van, Pomona	350.00
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ALABAMA

Chase Nursery Co., Chase	\$250.00
Elkon, Eros, Huntsville	20.00
Huntsville Wholesale Nurseries, Huntsville	250.00
Kelley & Sons, J. O., Jeff	10.00
Oak Lawn Nurseries, Huntsville	20.00

SOUTH-WESTERN SECTION

TEXAS

Baker Bros. Co., Fort Worth	\$ 25.00
Texas Nursery Co., Sherman	250.00
Waxahachie Nursery Co., Waxahachie	100.00

OKLAHOMA

Parker, Jim, Tecumseh	\$ 10.00
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PACIFIC COAST

CALIFORNIA

Fancher Creek Nurseries, Fresno	\$ 50.00
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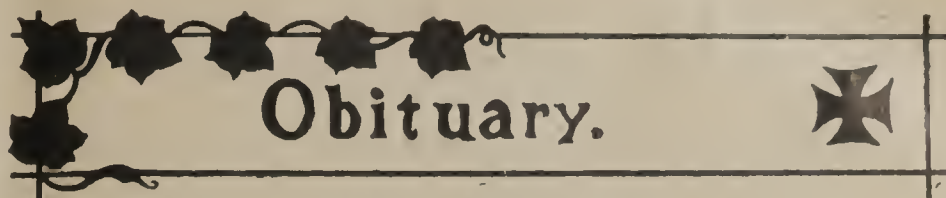
OREGON

Pilkington, J. B., Portland	\$ 50.00
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*Asked to be enrolled, amount of subscription to be announced later.

ADDRESS NOT RECORDED

Keith Bros.	\$100.00
Templin, Crockett & Bradley	100.00



Obituary.

JOHN VAN LINDLEY

We announce with deepest regret the death of John Van Lindley, on June 13, 1918. He was born November 5, 1838.

He was the founder and since its organization, president of the J. Van Lindley Nursery Co., Pomona, North Carolina.

In our June issue we gave a sketch of the life of the late John Van Lindley under the heading of "Deans of the Nursery Business."

The first hero from Pike County, Ga., to give up his life on the battle line in France, for liberty and civilization, was Sergeant Leroy Todd, of Concord, Ga. He was formerly an employe of Smith Bros. Nursery Co., but had been in the army over a year. He had been in France nearly a year. His death occurred on the battle line June 2nd. He was a member of the Marines. He has two brothers now working for Smith Bros., both being too young to enlist. He left \$10,000 insurance to his mother, who lives on the Smith Bros. place, not far from their office.

GOVERNMENT JOBS OPEN FOR QUALIFIED MEN

The United States Civil Service Commission announces that the Department of Agriculture is in urgent need of assistants in direct marketing, at entrance salaries ranging from \$1,200 to \$1,800 a year, and assistants in white-pine blister-rust eradication, at entrance salaries ranging from \$1,200 to \$1,440 a year. These positions are open to men only. The duties of assistants in direct marketing are to assist in securing information relative to quantity, quality, preparation, cost of marketing, and movement of farm products being marketed by parcel post or other medium of marketing direct from producer to consumer, and in disseminating information. The duties of assistants in white-pine blister-rust eradication are scouting for white-pine blister-rust, directing squads of men on blister-rust eradication, and in some cases conducting, under supervision, investigations of methods of eradication of this disease. For both positions certain specifications are made as to education and experience. Applicants will not be required to report at any place for scholastic tests, but will be rated upon their education, training, and experience, as shown by their applications and corroborative evidence and upon theses submitted with the applications. Full information and application blanks may be obtained by addressing the United States Civil Service Commission, Washington, D. C., or the secretary of the board of U. S. civil service examiners at Boston, New York, Philadelphia, Atlanta, Cincinnati, Chicago, St. Paul, St. Louis, New Orleans, Seattle, or San Francisco.

Mr. Leon Barbier, junior member of the firm of Barbier & Co., Orleans, France, has lately been accepted as interpreter in the American Army in France.

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by

THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in Nursery Stocks of all kinds. It circulates throughout the United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

Advertising rates will be sent upon application. Advertisements should reach this office by the 20th of the month previous to the date of issue.

Payment in advance required for foreign advertisements. Drafts on New York or postal orders, instead of checks, are requested by the Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be addressed, Editor, Flourtown, Pa., and should be mailed to arrive not later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., July 1918

Subscribers to "Nurserymen's Fund for Market Development"

NON-ESSENTIAL BUSINESS is taking place while the country is mobilizing its resources for the purpose of war, the nursery business is sure to suffer like all others that have to stand aside until the forces for destruction have been organized.

We hear and read a great deal about non-essential business. This is an unfortunate phrase at the best, as all business is essential, except that which has a tendency to degrade humanity.

Agriculture, horticulture and floriculture are fundamental and essential to our civilization, and must be carried on to the utmost detail, wherever and whenever war permits. It is up to the nurseryman to preserve his part of our economic structure during this crisis of the world's history, and not to let the invasion of the Hun cause his profession to slip back any more than is possible. It is true he will have to fight hard, but so do the men at the front. What greater disaster could happen to a victorious army returning to their homes than to find the orchards run wild, the lawns around the homes turned into weed patches and the beauty spots that took years of art and labor to produce, neglected and spoiled.

There has been enough such destruction in Belgium and France. There is labor and funds enough in the United States to keep things going as well as to build ships and lick the Hun, and it is up to the nurseryman to hold his part of the line until reinforcements return.

The editor of the National Nurseryman, takes this opportunity to express his appreciation to President J. R. Mayhew, for his action in offering and supporting a mo-

tion at the Chicago Convention of Nurserymen to permit the representatives of the Nursery Trade Journals to remain in the convention hall throughout all of the sessions, so that an accurate report of the proceedings might be printed.

The National Nurseryman has always supported the Association and its officers in its various aims, and this action of the Association will go far in creating an increased interest by nurserymen in its work, and should result in materially increasing its membership.

Now, if the Executive Committee could see their way clear to authorize and direct Counsel Smith to keep the Nursery Trade Journals informed of so much of the work of his office which might be of general interest, without disclosing matters of a confidential character, it would still further benefit the good work of the Association.

WHEAT RUST AND THE COMMON BARBERRY

Prof. Whetzel of Cornell University is chairman of a committee engaged in the wheat rust problem, and has sent out a leaflet giving information on this subject.

The very destructive stem rust of oats, wheat, rye, etc., including some of the wild grasses, is caused by a fungus (*Puccinia graminis*) which passes one stage of its life on Barberry leaves or fruit. The Barberry becomes infested in the spring from the Black Rust spores, which over-winter on the stalks of the cereal or grass hosts.

In the Southern States the rust winters on living leaves of the over-wintering grain or grasses, so the Barberry is not always necessary to perpetuate the rust. However, the Barberry's importance in starting the rust off early in the season is well established. In Denmark the eradication of the Barberry has almost entirely eliminated the stem rust.

It is only the common Barberry (*Berberis vulgaris*), and its horticultural varieties such as the purple-leaved one that are affected by the stem rust, *Berberis Thunbergii* being immune.

Nurserymen should stop growing the *Berberis vulgaris* and disseminating it. Landscape gardeners should cease to specify it on their plans or have it planted.

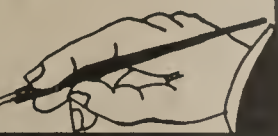
Prof. Whetzel advocates it being rooted out wherever there is a possibility of it proving a host in the vicinity of grain crops, and asks that specimens of the common Barberry be sent to the Department of plant Pathology, Ithica, N. Y., for examination wherever there is a suspicion that they are infected by rust.

Senator Orlando Harrison, of the Harrison Nurseries, Berlin, Md., made the dedication address on Farmer's Day at the Maryland State College of Agriculture.

It is the life work of such men as Mr. Harrison that does so much to prove the nurseryman's value to the welfare of the State.

Mr. Harrison has been the means of getting appropriations necessary for the building of the college buildings dedicated to the cause of agriculture, and it brings it home to everyone how fundamental and essential the nurseryman is, along with the farmer, to our very existence.

Answers to Correspondents



Montreal, June 19, 1918.

Gentlemen:—

How are Tree Peonies propagated?

F. A.

Ans:—Tree Paeonies are propagated by grafting on herbaecous paeonia roots, preferably of *Paeonia officinalis*.

August is a good time. Select good clean, healthy pieces of stock roots about as thick as your thumb. The scions should be one to two joints long, with the major portion of the leaf surface cut away. Make a neat union with the stock by cleft grafting and bind with raffia, pot in 3 inch pots. Long Toms will be found the most serviceable, and plunge in soil in a frame or hot-bed, allowing the soil to cover up the scion a little way. Then water, shade and treat as you would for cuttings, after the union takes place gradually give more air.

It is usually best to leave them undisturbed in the frame until planted out in spring.

If you have big stock plants they may also be propagated by laying.

CASTOR OIL THE BEST LUBRICANT FOR AEROPLANES

Up to the present time Hull has been practically the only center in the United Kingdom where castor seed has been dealt with. Owing to castor oil having been found to be the best lubricant for aeroplanes because of its not freezing at high altitudes, this branch of the oil trade has been given prominence. It is reported that in 1917 the British Government released about 7,000 tons of the best grades to the United States to be used as seed in order to grow supplies for securing lubricating oil for the Liberty motors.

Under date of June 19th, J. Hale Harrison, Harrisons' Nurseries, Berlin, Md., writes:—

We picked this morning the first peaches from our commercial orchards for shipment to the markets. The variety was the Mayflower.

This is the earliest date for some years that we have had peaches ripe in our orchards that we could ship on a commercial scale.

From the present prospects there is a good crop of Carman, Champion, Ray and Belle of Georgia peaches this season in our commereial orchards. The Elberta's are rather light,—not possibly over 25% of a normal crop. Some of the other yellow varieties, such as Slap-
pey, Brackett and Crawford's Late, there will be about 50% of a crop.

About the first of August is the time the bulk of our peaches will be picked and shipped.

Very truly yours,

J. HALE HARRISON.

BOOK REVIEW

INJURIOUS INSECTS AND USEFUL BIRDS

Another farm manual has been published by the J. B. Lippincott Co., of Philadelphia under the title of "Injurious Insects and Useful Birds, Successful Control of Farm Pests," by F. L. Wasburn, M. A.

Professor Washburn is professor of Entomology at the University of Minnesota. This fact of itself is sufficient warranty that the author is master of his subject.

The work was primarily intended as a text book for agricultural colleges, sufficiently technical to insure exactness, and yet intensely practical.

The copious illustrations make it a splendid work for identification of the numerous pests with which the nurseryman, farmer and gardener have to contend.

A brief life history of each pest is given so as to enable effectiveness in combatting them. The methods of control are practical and are such that everyone can understand and apply them. In fact, we would not wish for a better work on the shelf to which the farmer, gardener and nurseryman could appeal for information when any of his crops are attacked by insects or other pests.

Numerous as the diseases and pests are, it does not seem as if it were possible that the author has missed any.

The chapters on birds and mammals form a splendid introduction to our friends and helpers in field and garden. The price of the work is \$2.00 net.

The trade will be interested in certain changes that have taken place in the Advertising Department of the GARDEN MAGAZINE.

Mr. J. J. Lane has responded to the Nation's call and joined the army. His work in the Advertising Department of the GARDEN MAGAZINE is being carried on by Mr. Adolph Kruhm, who has been associated with the publication for some time past, and who before that was well known among the trade, particularly with the seedsmen.

Mr. Kruhm is a seedsman by profession, and was formerly associated with Burpee's and Livingston's. He specializes in horticultural advertising, and has done a great deal in his writings to bring about an understanding of the intricacies and simplicities of gardening by the average man, especially the amateur. He has recently published an excellent book on "Home Vegetable Gardening," and in his hands horticultural advertising in GARDEN MAGAZINE and COUNTRY LIFE should be well taken care of.

Born June 18th to Mr. and Mrs. E. B. Estabrook, at their home in Germantown, Pa., a son, weighing 7¼ pounds. Mrs. Estabrook was formerly Miss Dorothy Perkins, of Newark, New York, daughter of George C. Perkins, and the namesake of the well known and popular Dorothy Perkins rose.

Albert F. Meehan, Mt. Airy, Philadelphia, who served three months in the Third Officer's Training School at Camp Upton, N. Y., has been commissioned a second Lieutenant, and is now stationed at Camp Gordon, Atlanta, Georgia, in the First Replacement Regiment.

The Framingham Nursery Company, Framingham, Mass., have issued a very unusual catalogue. It is a magazine-like book with the title "Beautiful Home Surroundings," price 35c on the cover.

It presents the subject of plants from the customers' point of view. In other words, it is not what the Framingham Nurseries have to sell, but what the customer is likely to want for a special purpose. It gives the how, why and wherefore in about as simple language as possible. The Latin nomenclature, so difficult to the layman is subordinate to the common, popular or descriptive name. The plants it offers are grouped according to their uses rather than in alphabetical form. It is copiously illustrated and is a very instructive work, and is perfectly in line with the thought that originated the Market Development Movement.

WANTED

WANTED FOREMAN.—On account of the draft we are in need of a first class foreman, he must be a good grower and be able to handle men and know his business.

CORN BELT NURSERY & FORESTRY ASSOCIATION,
Bloomington, Ill.

OPEN FOR POSITION

An up to the minute Business Getter, experienced in Office Management, calling on Wholesale Trade and Organizing Retail Sales Force is open for a position, address:

K. L., CARE NATIONAL NURSERYMAN,
Hatboro, Penna.



EVERY SATURDAY

Advertising Space, \$1.25 per Inch. Subscription, \$1.50 per Annum

Under this title we publish the most reliable, progressive and up-to-date trade paper in the country, with departments covering the Nursery, Florist, Seed Trade and Allied Industries. With a paid up subscription and distribution list of 10,000 copies, nearly every copy of which is to men in business for themselves the worth of our columns will be readily appreciated. The editor of our Nursery Department is and has been for years, JOSEPH MEEHAN, of Philadelphia.

For sample copy, discounts, etc., address
The Florists' Exchange, P. O. Box 100, Times Square Sta.

FOR SALE

FOR SALE—A long established going nursery business with choice real estate nr. Chicago. A large stock of ornamental trees and shrubs in first class condition. This nursery has a fine reputation; location best in the country for nursery business. Can be had at a bargain to close an estate and on most reasonable terms. \$7,000 to \$10,000 will handle it. This is a real opportunity.

F. M. CLARKE, Attorney, 610 Reaper Block, Chicago.

FOR SALE—A well established nursery business near a large Western city. Ideal location and very fertile soil. Modern office building and warehouse, on a good Railroad. For particulars address:

D., CARE NATIONAL NURSERYMAN,
Hatboro, Penna.

FOR SALE:—Nursery with over forty acres of choice ornamental nursery stock including large collection of evergreens, shrubs, and perennials. This nursery is doing a high class business and has a good rating. Its annual business and acreage have both almost doubled in four years, the expansion being made from profits of the business. Location is good and friends are many. **Past year's business largest on record.** Reason for selling; war service. Will sell controlling interest or might sell less to experienced manager without sufficient capital.

"BOX W," Care of N. N.

TULIPS PEONIES IRISES NARCISSI

Peonies.—Standard varieties. Also a quantity of seedling singles and doubles, fine for extensive planting.

Tulips.—Darwin, Cottage, Parrot, in standard varieties and mixture. A large quantity of small planting sizes of Darwin, Cottage, and Parrot mixtures, Wedding Veil, White Queen, Kate Greenaway, Mrs. Potter Palmer, Clara Butt, Ellen Willmott, Bouton d'Or, Caledonia. If you wish any of these, write at once.

Irises.—Siberian in blue, white, and purple. German-Florentina, Flavescens, Kochii, Mad. Chereau, Gazelle and miscellaneous.

Narcissi.—Write for special offerings.

ORONOGO FLOWER GARDENS,
CARTHAGE, MO.

HORTICULTURE

A Magazine of Trade News and Cultural Information for the NURSERYMAN, FLORIST, SEEDSMAN and GARDENER. A reliable exponent of advanced Trade and Progressive Horticulture.

Published Weekly

SUBSCRIPTION \$1.00 PER YEAR

HORTICULTURE PUBLISHING CO.

147 Summer St. Boston, Mass.

ESTABLISHED 1893

THE NATIONAL NURSERYMAN

INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock. Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed.

Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all leading nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock offered for sale.

SUBSCRIPTION PRICE \$1.50 per year in advance. FOREIGN SUBSCRIPTIONS \$2.00 per year in advance.

Advertising Rates on Application

THE NATIONAL NURSERYMAN PUBLISHING COMPANY Incorporated

Subscribers to "Nurserymen's Fund for Market Development."

Hatboro, Penna.

When writing to Advertisers please mention the National Nurseryman.



Nurserymen Who Are Prepared Secure Profitable Contracts

Frequently you might secure contracts for park, cemetery or country estate developments if you could execute the entire work. Our organization will co-operate with you, supplying all factors for securing such contracts, and making much larger sales of your own nursery stock. The service we offer includes

Grading and Road Construction

Pools—Walks—Gardens

Large Tree Moving and Planting

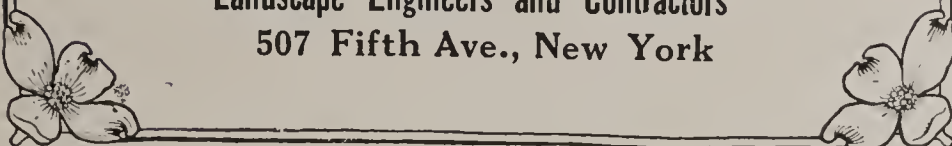
Contracts for spring work should be arranged for at once. We will go anywhere east of the Mississippi River. A wire or letter will place us in touch with you immediately. Write us for details of our methods and policy, and list of references.

"Constructors of Landscapes"

HYLAND-JENCKS

Landscape Engineers and Contractors

507 Fifth Ave., New York



NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER—We offer all or any part of an accumulation of long Nursery Bands one inch in width and sixty inches to one hundred and twenty inches in length, at a reduction of twenty dollars a ton. This offer holds good until stock is disposed of.

WRITE US

COVERING YOUR WANTS IN STEEL BANDS

American Steel Band Co.,

888 Progress Street,

ALLEGHENY, PA.

THE CHASE LABELS

For Nurserymen and Florists are Excelled by None

Plain, Painted, Wired with Tinned or Copper Wire and
PRINTED IN ANY MANNER that may be called for

*Prices as low as First-Class Work and Unequalled Promptness in
Delivery will justify.*

THE BENJAMIN CHASE CO.

P. O. Address, DERRY VILLAGE, N. H.

Western Union Telegraph, DERRY, N. H.

Subscribers to "Nurserymen's Fund for Market Development."

"BUDTIE"

What is it?

There will be no Raffia for sale this year. Government requisitioned all of it for war purposes.

What will you do for budding this year?

USE "BUDTIE" OF COURSE

Write us for samples and prices at once.

THOMAS B. MEEHAN CO.

Introducers of "Budtie"

DRESHER,

PENNA.

Subscribers to "Nurserymen's Fund for Market Development."

N. C. Natural Peach Pits

We are offering crop of 1917 for prompt shipment. We advise early planting and believe that nurserymen who look ahead will do well to get their seed rolling.

Price is \$2 per bushel of 50 lbs., sacked, f. o. b. cars shipping station, 7500 to 8500 seed per bushel, as long as they last.

J. VanLINDLEY NURSERY CO.

Pomona, N. C.

Subscribers to "Nurserymen's Fund for Market Development."

Bamboo Cane Stakes

Natural 6 ft., 2000 per bale

" 9-12 ft., 400 "

" 6- 9 ft., 600 "

Write for prices

McHutchison & Co., 95 Chambers St., N. Y.

NORWAY MAPLES

"Harrison Grown"

You know we have made an enviable record for quality in the Norway Maples that have been sent from our nurseries in past seasons.

We have blocks of them that are the finest we have ever seen. They are 8 to 16 feet high, with perfectly straight trunks. The heads are broad, symmetrical, with lower branches at least 6 feet above the ground.



This one block contains fifty thousand superb "Harrison Grown" Norway Maples

CAR LOTS IS OUR SPECIALTY. SEND YOUR ORDER AS SOON
AS YOU CAN, SO YOU WILL BE SURE TO GET SOME OF THESE
SPLENDID TREES.

WE INVITE INSPECTION

VISIT US

HARRISONS' NURSERIES,

Berlin,

J. G. Harrison & Sons

Maryland

Subscribers to "Nurserymen's Fund for Market Development."

Press of Robinson Publishing Company, Hatboro, Penna.

RECEIVED
AUG 9 1918



THE NATIONAL NURSERYMAN



AUGUST 1918

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of

*Peach, Gooseberries,
Currants, Berberis,
Spirea Van Houtte,
Other Ornamental Shrubs,
H. P. Roses, Etc.*

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.

Monroe, Mich.

Subscribers to "Nurserymen's Fund for Market Development."

MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

Shenandoah, Iowa



Our Specialty

A large and complete line of high quality Nursery Stock for the wholesale trade.

We still have a good assortment of FRUIT TREES, SMALL FRUITS, SHADE and ORNAMENTAL TREES, SHRUBS, ROSES and VINES.

With our superior storage facilities we are able to furnish a good assortment of stock for shipment until the middle of May.

ASK FOR TRADE LIST AND BULLETINS.

We are subscribers to the NURSERYMEN'S FUND FOR MARKET DEVELOPMENT, a co-operative national campaign to create new business. Ask about it.

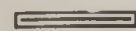
*Progressive, Superb
and Peerless
...Everbearing...
Strawberry Plants*

We can supply you fresh dug every day. Healthy true-to-name, well rooted at attractive prices.

Address

The W. F. Allen Company
Salisbury, Maryland

"RIGHT now H. P. Roses, Climbing Roses, Apples, Peaches, are very scarce. Write us for prices. Remember that we have acres of Ornamentals, carloads of Barberry Thunbergii and California Privet. Pleased to hear from you."



C. R. BURR & CO.

Manchester, Conn.

Subscribers to "Nurserymen's Fund for Market Development."

The
Preferred
Stock

The
Preferred
Stock

There Are Compensations TO THE NURSERY BUSINESS

One of them is to go over the nurseries in such a favorable growing time as we are having just now and see how well the stock is coming along. It helps us to forget the vacant spots which represent Jack Frost's depredations, the freight embargoes of last shipping season and the numerous anxieties and uncertainties of the past year. It fills us with hope and optimism for the future and assures us of being able to furnish stock of the usual high J. & P. quality for the coming season.

We expect to have good supplies of our usual specialties, such as Roses, Clematis, Tree Hydrangeas, Ampelopsis, also a full line of Perennials, Shrubs, Shade and Fruit Trees. Mail inquiries and, where possible, personal inspection of our stock, are solicited.

Jackson & Perkins Company
NEWARK - - NEW YORK

Subscribers to "Nurserymen's Fund for Market Development."

The
Preferred
Stock

The
Preferred
Stock

A Suggestion for Retailers

In the North and West, the Lilac is the most popular shrub planted. Why do we see so few of the good named varieties? Thousands are sold every year. It is because budded Lilacs are largely sold: budding is easy and growth is quick; but budded Lilacs are **not** the thing to plant.

Lilacs budded on Privet are **short-lived**; the Lilac is hardy everywhere but the Privet is not.

When budded on lilac seedlings, the stocks will **sucker** and smother the buds; amateurs cannot distinguish the stock from the plant; nurserymen can't either, and that is why they bud the colors on the white and the white on purple seedlings.

Own-root Lilacs are the only kind to plant; ours are all grown from cuttings; a Charles X is a Charles X **root and top**; as Jakey says: "De same number on de coat as on de pants."

Sell nothing but Own-root Lilacs; your customers will be satisfied; you won't get complaints about delivering "privet" and "common lilac" when the stocks outgrow the buds.

Sell Princeton Own-Root Lilacs—grown in leading varieties, single and double, and for Nurserymen Only.

Princeton Nurseries

Wholesale Growers for Nurserymen Only

at Princeton, in New Jersey

FRAMINGHAM QUALITY NURSERY STOCK

for

YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Now is the time to prepare for Fall business. Make us a visit during your vacation, inspect our stock and reserve what you require for Fall shipment.

Framingham Nurseries
FRAMINGHAM
MASS.

Hill's Evergreens

You can work up a good profitable trade in Evergreens if you have the right kind of stock. Our main specialty for over half a century has been the propagation of young Evergreen stock for the wholesale trade in immense quantities at low prices.

We have all the leading varieties in small sizes, for all purposes, suitable for lining out to grow on for your trade.

Nurserymen who have heretofore depended on Europe for their young Evergreen plants can now be assured of a good reliable source of supply right here in America, and we solicit the opportunity of quoting on your requirements.

"Made in U. S. A." and "American Stock for American Planters" should, from now on, more than ever, be the slogan of American Nurserymen for it means "money saved in the long run" to start with nice, strong, sturdy, vigorous American-grown stock which has been produced right here in America.



YOU want to keep posted on Evergreens;

WE want to become better acquainted with you;

Let's get together.

The D. HILL Nursery Co., Inc.

Evergreen Specialists

LARGEST GROWERS IN AMERICA

Box 401

Dundee, Ill.

PAINESVILLE NURSERIES

BIDDING FOR FALL BUSINESS

FRUIT TREES

APPLES
PEARS
PLUMS, Etc.

SMALL FRUITS

CURRENTS
GOOSEBERRIES
BLACKBERRIES, Etc.

SHRUBS and VINES

BUDDLEIA
CALYCANTHUS
CYDONIA
HYDRANGEAS
PRIVET
SPIREAS
WEIGELA
AMPELOPSIS
CLIMBING HSKLS, Etc.

ORNAMENTALS

ASH
Cut-leaf Wpg. BIRCH
CATALPAS
CORNUS
ELMS
HORSE CHESTNUT
JUDAS
LINDENS
MAPLES
MULBERRIES
—Tea's Wpg. and Globosa
POPLARS
SALISBURIA
SYCAMORE
WILLOWS, Etc.

ROSES

HARDY PERENNIALS

PEONIES, PHLOX, IRIS
and complete
General Assortment

* We will have no Dutch Bulbs this Fall; otherwise,
"BUSINESS AS USUAL."

Glad to handle your Want Lists.

THE STORRS & HARRISON CO.

NURSEYRYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

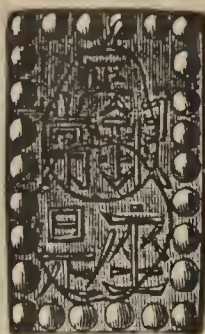
Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa

Subscribers to "Nurserymen's Fund for Market Development."

Heikes—Huntsville—Trees



Established 1872

1500 Acres

FRUIT TREES ROSES and other ORNAMENTALS

For the wholesale trade.
All of our own growing.

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

For Fall of 1918

Ornamentals, Shade Trees, Evergreens,
Perennials, Fruits, etc.

A large stock of the following:

Cherry Trees, 2 yr.
Apple Trees, 2 and 3 yr.
Peach Trees, 1 yr.
Norway Maple up to 2 inch.
Am. Elm, all sizes.

Write for special prices on car lots.

C. M. Hobbs & Sons
Bridgeport, - Indiana

Subscribers to "Nurserymen's Fund for Market Development."

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of Own Root Roses

ORNAMENTAL TREES SHRUBS
BERRIES CLEMATIS
EVERGREENS PEONIES PHLOX

and

HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY
GENEVA, N. Y.

70 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE

THE

North-Eastern Forestry Co.

CHESHIRE

...Connecticut...

A Pruning Book That Will Build Business for You



Here is a book that will help you by helping your customers.

It is a practical guide to right pruning and growing. It will tell every purchaser of your products how, when and where to prune for the most vigorous and healthy growth.

Knowing the kind of shears to get is equally as important as knowing how to use them. This book will give your customers some helpful information about shears too.

We'll Send You a Copy Free

We have a plan of co-operative selling and advertising of which "The Little Pruning Book" is an important part. It's a plan that will help you sell Nursery Stock and help us sell Pexto Pruning Shears.

You must see the book before you can appreciate the plan. It sells in book-stores for 50 cts., and believe us "It's worth sending for." Furthermore, sending for it does not obligate you in the slightest. It just gives us an opportunity to tell you about our business building plan.

Send for your free copy today.

The Peck, Stow & Wilcox Co.

2189 W. Third Street
Cleveland, Ohio



PRUNING SHEARS

We are now ready to quote lowest prices on
FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities. Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries
Sparta, Ky.

For FUMIGATION With
HYDROCYANIC ACID GAS
"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

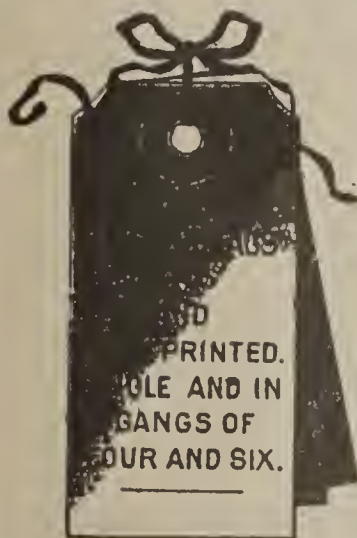
Manufactured in U. S. A. by
The Roessler & Hasslacher Chemical Co.
100 William St. - - New York, N. Y.

HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

**Rawhide Brand of Shipping
Tags and Tree Labels**

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.
West Chester, Pennsylvania

For FALL 1918

We offer a Complete
List of

Shade Trees, Shrubs, Evergreens

WILL BE PLEASED TO
SUBMIT PRICES

AUDUBON Nursery, P.O. Box 731, Wilmington, N. C.

P. OUWERKERK,

No. 216 Jane St., Weehawken Heights, Hoboken, N. J.
Rhododendrons, Clematis, H. P. Roses, Hardy Azaleas,
Paeonies, Magnolias, Box Trees, Fancy Conifers, Hydran-
geas and Shrubs, our specialties at our HOLLAND NUR-
SERIES. Some of the goods on hand here during the
packing season.

TREE SEED

Large assortment of Tree, Shrub and Fruit
Seeds for ornamental and forestry purposes.
Send for catalogue. **CONYERS B. FLEU, Jr.**
Germantown, Philadelphia, Pa.

CHERRY TREES

We offer, two and three year cherry, also some nice
2 year climbing roses, on own roots. All select stock.
Write for prices in car lots.
MILTON NURSERY COMPANY,
Milton - - - - - Oregon

Seeds For Nurserymen

Apple, French, Japan and Kieffer Pear, Myrobalan Plum and
Quince Seeds. Also Tree, Shrub and Evergreen Seeds in a
large assortment. My Catalogue contains complete list with
Prices. Send for a copy.

THOMAS J. LANE
SEEDSMAN

DRESHER,

Penna., U. S. A.

WE OFFER

Grape Vines, Currants and Gooseberries
in all varieties and grades, also
Grape and Currant Cuttings and Light Grade of Vines for
Lining Out in Nursery Rows
WRITE FOR PRICES

F. E. Schifferli, - Fredonia, N. Y.



Unusual and rare stock in great varie-
ty; hardy Bamboos, Palms, Crapemyr-
tles, fruit and Economic trees and
plants, etc., etc., from all over the world.
New additions constantly being tested.
Ask for complete descriptive catalog, and
wholesale rates. 34th year.

REASONER BROS.,
ONECO - - - FLORIDA.

PRINTING

Catalogues
Stationery
Business Forms



The Robinson
Publishing Co.
Hatboro, Pa.

Specialists in Nursery Printing
Ask for Prices. We are the printers of this Magazine



Field-grown own-root

Roses Shipments Jan. 1st
to March 15th

Howard Rose Co., Hemet, Cal.

Peonies

Profitable cut-flower and best general plant-
ing varieties. Very early, early, mid-season,
late. Any quantity. Own growing. Early
September shipment. Submit list.

HARMEL PEONY COMPANY,
Berlin - - - - - Maryland

THE WESTMINSTER NURSERY

J. E. Stoner, Prop.

WESTMINSTER - - - - - MARYLAND

Offers for Fall, 1918:

10,000 Monacacy Apple, 2 yr., Buds.
250,000 Cal. Privets, 2 yr. and 3 yr.
500,000 Asparagus Asst., 2 and 3 yr.
Barberry Thun., 3 yr., extra fine.
Lombardy Poplars, 8 to 16 feet.
Oriental Planes, 8 to 16 feet.
Tulip Poplars, 6 to 12 feet.
Horse Chestnuts, 8 to 12 feet.
Catalpa Speciosa, 8 to 12 feet.
Can supply the above in CAR lots.

We also offer in large lots, Rhubarb, Cumb. Raspberry,
Ruby, Miller, and St. Riggs Raspberry Altheas, 3 to 5 feet,
Deutzias, and Spireas Asst., Hydrangeas P. G. Etc. Will
make low prices for early orders.

FAIRFIELD NURSERIES

FRUIT AND SEED FARMS

OFFER for Fall 1918

GRAPE VINES—One and two years old. Varieties
largely Moore's Early, Concord and Niagara.

Also Scarlet or Crimson Clover Seed and Cow Peas.
Free from weed seeds, all recleaned and guaranteed first
class.

Correspondence solicited. Price list upon request.

CHAS. M. PETERS

P. O. Address, Salisbury, Wicomico County, Md., R. F. D. 3

Long Distance Phone and Telegraph, Salisbury, Md.

EVERBEARING STRAWBERRY PLANTS

If you need Everbearing strawberry plants to fill spring
orders or if you wish to increase your planting in nurseries,
we can supply you with genuine PROGRESSIVE Everbearing
plants, guaranteed to be TRUE TO NAME and handled so as
to reach you in best of growing condition. Write for prices.

We have been growing and breeding the Everbearing straw-
berries for the past eight years and have many new varieties
growing in our experimental grounds that are not yet for sale.
We invite a personal visit to our grounds during fruiting sea-
son, preferably during August or September. The latch string
is always out.

THE GARDNER NURSERY CO., Drawer 103, Osage, Iowa.

ENGLISH NURSERY STOCK

GROWN IN LARGE QUANTITIES

RHODODENDRONS, a splendid lot this season, fine bushy plants. Plenty of the hardy Catawbiense named varieties suitable for the American climate including the newer and superior kinds, and well budded plants for forcing.

AZALEAS, ANDROMEDA, KALMIA and other American plants in great variety.

CONIFERS a large stock, of all hardy kinds.

HARDY ORNAMENTAL, EVERGREEN and DECIDUOUS TREES. These at right prices.

ROSES. Dwarfs, leading kinds.

MANETTI stock, fine 1 year, a limited quantity.

CLEMATIS AND CLIMBING PLANTS.

FRUIT TREES Espalier trained pyramids and bush fruits in quantity.

FRUIT TREE STOCKS, APPLE, PEAR, PLUMS, etc.

A general assortment of hardy outdoor stock. Glad to answer inquiries.

No Agents. Write direct for wholesale catalogue to

WALTER CHARLES SLOCOCK, Goldsworth Nurseries, Woking Surrey, England

Half an hour's rail from London & S. W. Ry., Main Southampton Line.

Glad to see visitors.

HARDWOOD CUTTINGS PRIVET ALL KINDS

We make a specialty of the above and can give you extra good service. Write us.

OAKLAWN NURSERY,

Huntsville

Ala.

:: Peony Profits ::

Can be had only if you have the Peonies. The profits are there if you go after them. The demand for both plants and flowers is increasing. Prepare to get your share. Order now and be assured of your supply.

Wild Bros. Nursery Co.

Sarcoie, - Mo.

TULIPS PEONIES IRISES NARCISSI

Peonies.—Standard varieties. Also a quantity of seedling singles and doubles, fine for extensive planting.

Tulips.—Darwin, Cottage, Parrot, in standard varieties and mixture. A large quantity of small planting sizes of Darwin, Cottage, and Parrot mixtures, Wedding Veil, White Queen, Kate Greenaway, Mrs. Potter Palmer, Clara Butt, Ellen Willmott, Bouton d'Or, Caledonia. If you wish any of these, write at once.

Irises.—Siberian in blue, white, and purple. German-Florentina, Flavescens, Kochii, Mad. Chereau, Gazelle and miscellaneous.

Narcissi.—Write for special offerings.

ORONOGO FLOWER GARDENS,

CARTHAGE,

MO.



PECAN TREES

QUALITY SERVICE

W. L. STEWART
VALDOSTA, - GA.

Member Southern Nursery Association

ESTABLISHED 1893 **THE NATIONAL NURSERYMAN** INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock.

Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed.

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Hatboro, Penna.

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Under the present conditions we find the mail is often delayed and we ask our patrons to please send advertising matter promptly to our office at Hatboro, Pa.

BUNTING'S NURSERIES

Offer for Fall 1918 and Spring 1919

STRAWBERRY PLANTS, Leading standard and everbearing varieties.

ASPARAGUS ROOTS, 1 and 2 year.

CALIFORNIA PRIVET, 1 and 2 year.

Can furnish above stock in car lots or less. We also have a limited supply of Concord grape vines, 2 year Barberry Thunbergii, 2 and 3 year Spirea Van Houtte, Hydrangea P. G. Deutzia, and Weigela assorted, Philadelphus Grandiflora, Forsythia Fortunei, Butterfly Bush, Altheas, Dorothy Perkins roses 2 yr. strong, Norway and Sugar Maples, Catalpa Speciosa, Norway and Douglas spruce, Scotch and White pines, etc.

Write us covering your wants in any of the above stock, prices as low as first class stock and prompt service will justify.

G. E. BUNTING & SONS,

SELBYVILLE,

DELAWARE.

Subscribers to "Nurserymen's Fund for Market Development."

Peonies and Iris

Send for New Price List

...OUR GUARANTEE...

We will replace with three all plants not proving true to description.



Peterson Nursery

30 N. La Salle Street

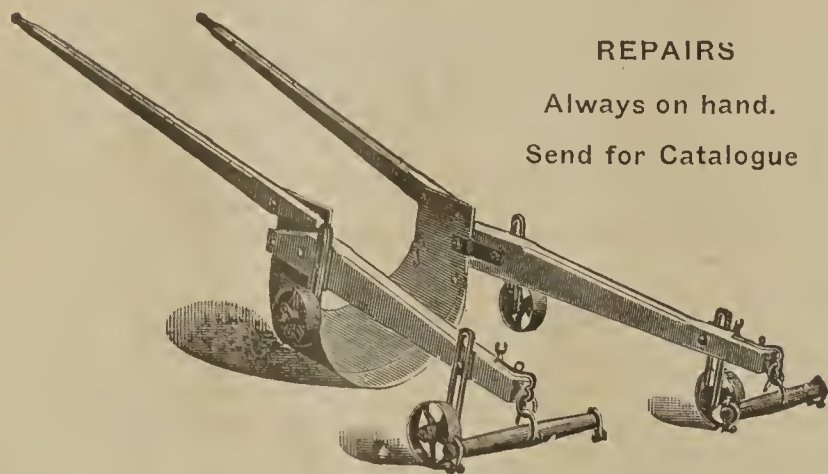
Chicago,

Illinois

1857

1918

BRAGG'S COMMON SENSE TREE DIGGER



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We are pleased to offer for Fall or Spring:

CHERRY, 2 year X X 1 inch up, also $\frac{3}{4}$, $\frac{5}{8}$ and lighter grades.

CHERRY, One year $\frac{11}{16}$ up, $\frac{5}{8}$ & $\frac{1}{2}$ to $\frac{5}{8}$

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We bud annually 500,000 Cherry, they are making splendid growth.

Peach, One Year, all grades leading Varieties.

Plum, Japan and European, One and 2 year.

APPLE, 2 year, a few cars for late fall shipment.

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Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSEYSTOCK

The National Nurseryman Publishing Co., Incorporated

Vol. XXVI.

HATBORO, PENNA. AUGUST, 1918

No. 8



Abies (Picea) concolor, Colorado Silver Fir is a fine tree for growing on a lawn as a specimen

LAWN SPECIMENS

There is no kind of tree that adds so much "class" to the grounds as one of the exotic Spruces and we might add firs, although for richness and beauty the Spruces easily lead.

According to the Standard Cyclopedia of Horticulture, most nurserymen erroneously call the Firs, Spruces, and vice-versa.

In other words we should say Silver Spruce, *Abies concolor*, and Norway Fir, *Picea excelsa*.

To the average layman there is not much difference between the Firs and Spruces, and he is more likely to call either of them a Christmas tree than anything else.

This type of tree has not gained in prestige in many parts of the country, due to a too free planting of the Norway Spruce, which so soon gets thin and ratty looking. If more *Abies concolor* (see illustration) *A. Nordmanniana*, *A. Veitchi* were more freely planted so they would be better known and popular, they are, however, not so adaptable as the spruces.

Like the Norway Spruce the Colorado Blue Spruce has been a little overdone. It would be much better if the Oriental, Black, White, Tiger Tail and other good kinds were more freely planted.

A SUGGESTION OF THE WM. H. MOON CO. WORTHY OF EMULATION

The William H. Moon Co., Glenwood Nurseries, Morrisville, New Jersey, are arranging to plant a tree in honor of every man in the home town who has answered the call of Uncle Sam and is now in the service.

This suggestion should be agitated in every part of the states as it would be difficult to find a more appropriate movement to commemorate the call to arms in the world war.

The trees will be enduring monuments and a permanent improvement to the various localities. Planted under such incentive, they would be cared for, and encourage a personal interest in trees in thousands of people who otherwise would have none. If we look into the future, what could be finer than beautiful avenues of shade trees, each one dedicated to some old soldier?

The suggestion is worthy of a big effort by the Market Development Organization.

Following is the clipping from the *Trenton Times*:

"MORRISVILLE, July 15.—In honor of all the Morrisville young men who have answered the call of Uncle Sam and are now serving either in the army or navy, the William H. Moon Company, proprietors of the Glenwood Nurseries, will plant more than 100 trees here, one for each Morrisville man in the service.

Several members of the Moon company are members of the Morrisville Chamber of Commerce, and at a recent meeting of the trade body, when it was announced that Morrisville had more than 100 young men in the service, Edward Moon, a member of the nursery company, decided upon the tree planting scheme.

The matter will be presented to the commerce body at its next meeting and this organization will be asked to decide where the trees are to be planted and to map out the program. Several places have already been suggested for the trees, including streets, while another is to plant them in the new State park which will be laid out at the Morrisville approach to the free bridge. Every tree will bear the name of the soldier or sailor it was planted for, and a plate bearing his full service record will be placed upon each one. The planting will be done under the direction of the nursery company.

While no plans have been made for the celebration to be held in connection with this planting, members of the Chamber of Commerce expect to make this a big day for Morrisville. The family of every boy in the service will take part in the exercises and assist in planting the tree for the one who represents the family in the war. There will be a street parade and several prominent speakers will deliver addresses."

POLITICAL HONORS FOR HENRY B. CHASE

According to the Huntsville Mercury, Henry B. Chase, will be the next mayor of that city. For some time Mr. Chase has been president of the Huntsville City Council, where he has evidently impressed his co-workers and the city at large with his unusual executive ability.

The result has been that practically all the best elements in Huntsville of different political persuasion, combined together and practically thrust the nomination for mayor upon him. It was evidently not an easy matter, as Mr. Chase probably thought that "uneasy lies the head that wears a crown," and refused to accept it, unless he could have a congenial Board of Aldermen to work with, with the result that every man on the slate will have to be acceptable to Mr. Chase. There is every probability that Mr. Chase will be the only candidate, and his nurserymen associates at the next Convention, will have to address him as "His honor, the mayor."

CONVENTION OF THE INTERNATIONAL APPLE SHIPPERS

The International Apple Shippers of the World will meet in convention at Philadelphia, Pa., August 14-16.

The Bellevue-Stratford will be headquarters. Delegates from every apple growing state in the union will be there.

A large exhibit of fruit is being arranged for and will be displayed in the Palm Room.

It is expected that the apple growing states will vie with each other for honors in staging the best display.

According to the officers of the Association 200,000 barrels will be shipped to the soldiers in France this year, in addition to the thousands of barrels to be shipped to England.

The Magee Wholesale Nurseries has just filed articles for incorporation, capitalized for \$100,000.

Mr. C. W. Magee started the nursery in Illinois, later moving to Loomis, Cal., where he has been eminently successful, and has now 300 acres under cultivation.

The object of the Company is to do a strictly wholesale business, to plant young orchards and sell out in small tracts.

MARKET DEVELOPMENT

With the Nurserymen's Organization for Market Development so recently started in motion, every bit of information bearing on efforts along similar lines will have value. The following from the Canadian Horticulturist by Chilton Gano, suggests methods and results and indicates the magnitude of the work undertaken by the nurserymen.

FRUIT FARMERS WHO USE BIG-BUSINESS TOOLS

Some years ago the farmers of the Northwest apple-growing States of the Union systematized the production, grading and packing of their fruit, and are to-day commandeering the services of the country's greatest business-building machine to help them sell their fruit at the best prices.

The business-building tool or system referred to is Advertising. Advertising is not often thought of as a machine or system, but nevertheless, the advertising mediums of the world, used on a large scale, constitute nothing else than a huge machine whose wheels may be set turning in the service of any legitimate enterprise which will pay the necessary price.

The first farmers to commandeer the services of advertising on a national scale were the orange growers of Southern California. In the past few years the Sunkist campaign has reached the status of an established success, and has led some other organizations of fruit-growers to follow the lead. It is of the Northwestern Fruit Exchange, which a little more than a year ago began the first national advertising campaign on trade-named apples, that, as the nursery rhyme has it, "I'm a-going for to speak." It is believed the story will interest Canadian apple-growers, who have been to some extent apple advertisers themselves since the Fall of 1914.

Under the heading, "Skookum in 1916-17," Manager W. F. Gwin, of the Northwestern Fruit Exchange, recently wrote a series of letters to the several thousand farmer-members of the Exchange, telling the intimate, detailed story of the first year's experience in advertising Shookum Apples to a hundred million Americans. These letters are much too long and detailed to be reprinted here, but they give a veracious story, being in a sense the official report of a public servant to his constituency. Springing from such a source, what the writer shall say of Skookum advertising may be considered absolutely authentic.

The national campaign on Skookum was not altogether an experiment. It had been preceded by a two-year campaign in a single city, New York. \$15,000 had been spent for advertising the brand in New York, using mainly cards in the street cars. Only the extra-fancy grade of fruit was packed under the Skookum label, and only the eight varieties of apples considered the best were eligible. This first Skookum advertising was highly interesting, because it did more than show attractive pictures of good apples and claim quality. It told people things about apples they had never known before. It told which varieties were best in the different seasons, how certain varieties deteriorate in storage, which varieties are best for different culinary purposes, new ways to serve apples, etc. Long before the two years were completed Skookum Apples brought the highest prices obtainable on the New York market, were known by name to all New York, and were being featured regularly by leading grocery stores, big hotels and restaurants, etc., in their advertising and on their menus.

The national campaign, which was begun in September, 1916, with attractive advertisements in national magazines, became merely an elaboration of the New York policies, as they had proved their merit. Four varieties were added, making twelve Skookum varieties, a new and more elaborate recipe booklet was prepared, showing each variety in color, new incidental publicity items were developed, for instance, Skookum apple balloons, made in Japan. The Skookum trade-mark was also adopted at this time. "Skookum" is a Chinook Indian word meaning "Fine," "Great," "Bully." The trade-mark consists of the face of a smiling Indian Imp. It appears on the tissue-paper wrappers of the fruit, the box labels, and in all publicity matter.

Mr. Gwin's account of the launching of this first national apple campaign is full of human interest, and may well be quoted here, in part:—

"As we got down to the actual engineering of the 1916 cam-

paign in the weeks preceding the actual launching of our plans, I found I had never been so busy in my life. The main steps in these plans were already marked out before the Skookum Packers Association members voted that resolution for a national advertising campaign appropriation for Skookum apples, but the details required the closest attention, and I made up my mind that we would consider every view-point, investigate every suggestion, and finally eliminate until we had left only what was safe and good. I realized that this Skookum fund must make and would make Northwest apples known in every corner of America, to be demanded by millions of consumers, and it must be handled with the utmost care and skill.

"I should tell you that during those weeks of planning the best experts in advertising in the United States called at the Exchange offices, including even special representatives of the great Curtis organization; the discussions with these experts were invaluable. Meanwhile, the tentative advertising ideas were being worked out, and subjected to review and criticism both in ideas for advertising text, the medium of its placing, and the pictorial matter. Before the final trade mark of Skookum, the Indian maiden face of the covetous and merry smile, was accepted, it is no exaggeration to say that fifty sketches by leading artists of New York were submitted, and the trade-mark as it stands to-day is a composite of a number of these sketches, and is acclaimed the equal, if not the superior, of any national or world advertising character or figure.

"Knowing that our advertising would cause a profound demand for Skookum, what to do now to reap all possible profit for the growers? The f. o. b. sales system to wholesalers exactly dovetailed in with an advertising sales campaign. We knew that advertising would sell Skookums by carloads in 1916 where a North-west apple had never been seen in previous years. That meant some big things to the growers. We argued: Skookum will take hold of the progressive wholesaler; he will want it, and he will push it; it is a safe quality, an advertised, splendid apple that he should have—so Skookum in 1916 will have a wide distribution that is the cream. In plain words, Skookum would have the pick of the 1916 demand.

"The Exchange intimated to the growers that everything else being normal, there was a prospect, under our plan, of placing a good part of the crop while the apples were still on the trees. With this in view we prepared a portfolio to show to wholesalers showing sketches of full-page and other advertisements of Skookum which it was proposed to publish in the Saturday Evening Post, Ladies' Home Journal, Good Housekeeping, Literary Digest, Life, Sunset Magazine, etc., etc. The portfolio also showed sketches of Skookum colored cards to appear in street cars, and the pictures of the Skookum wrappers, the apple novelty balloon, pictures of the Skookum mats to hang in stores, and other helps to retailers to sell their stock of Skookums; also a description of the Skookum recipe book. In fact, this portfolio was a prospectus of the Skookum campaign.

"With this portfolio, then, and with the plans and appeal of the Skookum campaign well in hand, representatives of the Exchange started out early in June to make a personal canvass of a large number of the wholesale and retail dealers. Our representatives in some instances were invited to address the retailers' association as a body. Willingness to co-operate and assist in the marketing of the Skookum crop was freely expressed. In fact it became so that the trade anxiously awaited the appearance of the first advertising and the appearance of the first car of Skookum. A number of merchants carefully formulated their plan in advance, and before this preliminary canvass was completed several hundred cars of Skookum apples had been booked at open prices, which prices were to be agreed upon before the fruit was ready for harvest.

"I don't want to give a too gushing impression of this success. There are always squareheads and soreheads and those who hang back, and there is always opposition anywhere you go and to anything you do. We all know that—at least, those of us who have a gray hair or a furrow or two beginning to show. But nevertheless we met principally with an unstinted welcome."

\$60,000 was expended in the first year's national campaign. For a national campaign this fund was comparatively small, and there is hardly a question that it secured results beyond what might fairly have been expected. It secured the recognition of the new

brand by wholesale and retail trade throughout the country, impressed the message of Skookum quality upon the consumer, causing a quite active demand, and easily provided for the ready sale of the Exchange's entire supply of extra-fancy apples.

The Exchange has been actively preparing to increase its output of extra-fancy fruit, to meet a bigger demand this year, and has increased its advertising appropriation. In short, the indications are that Skookum has become a fixture in the fruit markets of the country, and that Skookum advertising, like Sunkist, will show growth with every year.

EMBARGOES

Much controversy is being carried on in the antipodes in connection with crown gall on fruit trees according to the "Australasian International Nurseryman."

It seems that prior to 1916 thousands of fruit trees were imported into New Zealand from Victoria, Australia, thus enabling the New Zealanders to build up a large export trade in fruit from trees propagated in Victoria.

Now the business is well established they have placed an embargo on fruit trees from Victoria ostensibly because the trees are affected with crown gall, and may be because by shutting out the Victorian trees they can get better prices for their own.

If it were only possible to eliminate the selfish element from embargoes we should all look on them as friends instead of something that is established for the benefit of the other fellow.

BUSINESS STILL LIVES!

The supreme factor in American business today is the government. Through its power to regulate the distribution of fuel and materials it controls practically all the industrial activity of the country. Through its military and industrial powers it affects all labor. By price-fixing it controls mining and important agricultural operations. By licensing and priorities it controls traffic on both land and sea. It operates railways, shipyards, munition plants. It owns navy yards, armories, gun factories, powder plants, a security-issuing corporation.

An unprecedented degree of the power of industry has, because of a people's passion for victory, been willingly given up to those in authority over us. Yet business lives. The government desires it to live. The government calls upon it to preserve, to strengthen its own organizations. The government urges it, not only to make its voice heard now, but to take serious counsel regarding the future.

This work has begun. Parliaments of business are gathering daily at Washington. Upon the calendar of their deliberations is written: First, how can we help win the war? Secondly, what is our program, once the day of victory has come?—*Harry A. Wheeler in the Nation's Business for August.*

Louis Berckmans, Augusta, Ga., whose marriage we had the pleasure of announcing last summer is now the proud father of a fine young lady.

The new Miss Berckmans is already receiving calls from the young officers from Camp Hancock and there is not the slightest doubt she will gain in popularity as she gets older.

THE YEAR-BOOK OF THE DEPARTMENT OF AGRICULTURE

The year book of the Department of Agriculture for 1917 is being distributed. Naturally it is largely devoted to subjects of especial interest to the farmer, but there are a number it would pay the nurseryman to read.

The Sources of Our Nitrogenous Fertilizers by Frederick W. Brown, tells of the only important natural deposits in Chile, and the great demands on this source made by the manufacture of munitions.

Another growing source is the production of Ammonia Sulphate from improved methods of producing coke. The ammonia is saved in a retort instead of escaping into the air as formerly, and treated with sulphuric acid. Cotton seed meal is another source which contains 5 to 8 per cent. of available nitrogen and enters largely into the manufacturing industry.

Slaughterhouse waste, and fish are also a source of supply.

The extraction of nitrogen from the air is still in a more or less experimental stage but is promising as a source where power is cheap.

Production of Drug Plants Crops in the United States by W. W. Stockberger, speaks of the drug crisis precipitated by the war. Contrary to the popular magazine writings it is not a get-rich-quick proposition.

The nurseryman, however, may get suggestions of a crop that he could handle profitably.

Phosphate Rock our Greatest Fertilizer Asset, by Wm. H. Waggener.

Until recently Stassfurt deposit in Germany was considered the only source. Now there are very encouraging signs that this country will be able to supply the world as there are enormous deposits of phosphate rock in different parts of the United States.

Danger of Introducing Fruit Flies into the United States, by E. A. Back.

This article points out the danger of introducing these pests into this country and what steps have been taken to prevent them getting a foot-hold. The danger of their being introduced on nursery stock is not so great as on imported fruit, especially that brought in by returning travelers, which is liable to escape inspection.

The Weed Problem in American Agriculture, by H. R. Cates.

A well kept nursery is not supposed to have any weeds but they do come.

The article states that "Crop rotation is a foe to weeds" and also suggests that "An important requirement is to keep on the lookout for new weeds that may be introduced into the locality"

Nurserymen will appreciate this; for there are few nurseries of any age that have not had at some time in their history some pest introduced which, if prompt action to eradicate had been taken it would have saved much time and money.

Conservation of Fertilizer Materials from Minor Sources, by C. C. Fletcher, includes a table giving fertilizer values of various materials expressed in percentage of nitrogen, phosphoric acid and potash content.

The list of over 150 items is very diversified and not only includes some of the standard fertilizers but such

materials as banana skins, coal ashes, coffee grounds, eggs, New York garbage, leather scrap and such material that is often available in quantity.

AFTER THE WAR

We are all interested in conditions of trade that will prevail after the close of the war.

While it is interesting to note the opinions expressed in other countries it does not follow they will apply in the United States.

U. S. Consul E. Haldeman, Dennison, Birmingham, England, quoting a memorandum prepared by a special committee of the Birmingham Chamber of Commerce says:—

"Taking trade as a whole, there will be serious depression after the war, owing to many factors which will operate. This depression will be great, immediate, and will continue for a long period. It will particularly affect the luxury trades. Among the reasons for this opinion are: The Government will immediately cancel the munition contracts; there will be a considerable shortage of tonnage and a serious lack of railway facilities, owing to inadequacy of rolling stock, etc.; much dislocation of trade and industry will be experienced during demobilization; trade organization, which was proceeding, will necessarily be delayed, pending the settlement of satisfactory relations between employers and employed; and much time will be occupied by works and factories in changing over from the production of munitions of war to the production of articles of peaceful commerce."

Committee's Recommendations.

With regard to remedies or palliatives, the committee makes the following suggestions:

A certain amount of control, both in the price and in the distribution of materials and commodities, will be desirable and necessary at the close of the war, but this should be withdrawn at the earliest possible moment. Treasury restrictions on the issue of new capital should be removed. Dividends should not be limited. Antidumping legislation should be enacted, providing at least for an additional customs duty equal to the difference between the invoice price for export and the fair home market value in the exporting country. A certain portion of the excess-profits duty now taken by the Government should be placed to reserve for the purchase and holding of trading stocks after the war. Repayment of excess profits in recoupment of later losses or deficiencies should operate over a period of at least four years instead of two years, as at present.

It is hardly to be expected there will not be a depression in this country or at least a disturbance during the process of demobilization and readjustment of trade. That it will be of long duration is very doubtful. The capacity of the United States for absorption of labor is unlimited, and it is hardly probable that military conditions will permit of a sudden change.

This, combined with the well-known ability of the United States to quickly adjust itself to change will prevent serious depression.

We are more likely to see as much enterprise and energy devoted to catching up the shortage in depleted stocks and suspended operations as is displayed in building ships and making war equipment.

We herewith enclose you our check for \$1.50 as subscription to the National Nurseryman. We do not wish to miss any number of the paper and hope that this will reach you in time for the June issue.

Yours truly,

H. M. SIMPSON & SONS,

Vincennes, Ind.

A. Kruhm in "Horticultural Advertising" makes a telling plea for consistent and persistent advertising of nursery products.

INCONSISTENCY IN A GREAT INDUSTRY

Most nurserymen are, above all, practical, hard-headed business men. The fact that it takes many months, yea years of hard physical labor to produce the goods they sell, makes them so. Still, their actions often prove so inconsistent that the rank outsider cannot help but notice it.

Visit the well-conducted nursery these days, and, at every hand, you'll see horses and cultivators and men to guide both, combating the weeds between the orderly rows of trees, shrubs, plants, etc. Most of these plants, etc., won't be for sale for at least another year, some of them not for several years. Yet, the nurseryman is reluctant to let weeds thrive between the rows, lest they should retard the normal development of the cultivated plants.

The foresight thus exercised is commendable. The wonder of it is that the industrious nurseryman does not cultivate his sales fields as he does his growing fields. He does not expect to dispose of most of his stocks until a year from now, yet he cultivates his fields twice a month. When the time comes for selling the stock he often expects a single short announcement to attract attention, arouse interest, create desire, and close the sale. Often a two inch space is expected to do it all.

How inconsistent it is to grow plants over a period of years and not tell the public that you are doing it for them. We know of several nurserymen who grew fruit trees to bearing size age, requiring from five to eight years, and who never breathed a word about it until they had to sell the trees in order to clear the land on which they were growing. It was a case of selling then or relegating the trees to the brush heap. Most of them went up in smoke.

It is time that the nursery industry as a whole take this matter of selling seriously. Sales are not made in a day, nor in a month. It often requires years to cultivate the good-will of an audience, especially if it is composed of conservative people. Folks are quick to grasp opportunities, but slow to make changes. We know of some readers who still buy everything they need for the garden from X in Philadelphia, because their parents did it. But the fact that X advertises the year 'round counts much in keeping up the reader's faith in the consistent business efforts of this particular house.

Here's the moral:—Tell the people regularly what you have for sale. During off-seasons for selling, tell them what you are getting ready for them. Above all, let every advertisement breathe optimism, for a pessimist never makes a good salesman.

GEORGIA FRUIT TREE BILL

There has just been filed in the Georgia Legislature a bill (S. 214) to establish the measure of damages in those cases where fruit trees are not true to name.

The purchaser may collect \$3.00 per tree for each year between the date of purchase and the first day of November of the year in which such trees shall have borne fruit disclosing the variety thereof.

It is apparent that no Georgia nurseryman could sell any fruit trees if this bill were enacted. A thousand trees taking seven years to bear fruit would involve damages payable by the nurseryman of \$21,000.00. Such measure of damages is absurd, and does not, in any event, represent the actual damages, as a review of cases decided by the Courts will show.

This bill, if enacted, would render the more or less usual disclaimer of warranty clause employed by American Nurserymen of no avail.

CURTIS NYE SMITH.

A total computed lumber cut for the United States in 1917 of 35,831,239,000 feet is announced by the Forest Service.

NEWS FROM THE FRONT

"Bill" Flemer of the Princeton Nurseries, Springfield, N. J., writes a very interesting letter from France, which indicates that all is not gory war all the time.

Mr. Flemer was in active service in the Noyon sector. Prior to this he and two of his friends from the Company were on furlough in southern France.

Every four months the boys receive a ten-day furlough, plus the time for travelling and a free ticket both ways. He is very enthusiastic about the excellent treatment they receive, and believes he is in one of the best fed units of



Some of our boys having a good time in France. Mr. Flemer is on the left of the picture marked X

the Ambulance Corps, as has been proved by one of the boys who left for another unit.

On his last furlough, Mr. Flemer went to Paris, Marseilles, Nice, Monte Carlo and Menton. From Menton he took a number of day trips into the mountains by donkey. The accompanying photograph is a snapshot taken while on this trip, where they had a splendid time.

Mr. Flemer is very enthusiastic about the wonderful beauty of southern France, especially of Nice and Monte Carlo. In the last named place no soldiers were allowed to gamble, but the place was crowded with civilians.

He appreciates very much the numerous letters he has

received from friends in the business, which he credits to the National Nurseryman having published his address.

His address has been changed to:

S. S. W.—523

Convois Automobile,

Par. B. C. M.

Paris, France.

Mr. C. T. Smith, president of Smith Bros. Nursery Co., of Concord, Ga., was appointed County Chairman of the War Savings Certificate Campaign for Pike County, Georgia. The quota for this county was \$428,820, which is the largest sum ever subscribed in the county, for any purpose, and much larger than the banking capital of the county. The full amount and a good margin over, was all subscribed before noon, June 28th, and notice was immediately sent out from the State Headquarters at Atlanta, that Pike County was the first county in the state to go "over the top." Mr. Smith and his friends feel much gratified with his success in this campaign and in winning first honor over the other 148 counties of this state.

BOOK REVIEW

A small book has been published by the A. T. De LaMare Co., 448 W. 37th St., New York, that should be of extreme interest to nurserymen. The title is "Commercial Plant Propagation" by A. C. Hottes, assistant professor of horticulture at the Ohio State University.

Prof. Hottes has happily grasped the needs of the commercial or practical plant grower, and has so arranged the book as to make the contents immediately available.

It is not an academic treatise on the subject, but a compilation of methods for the practical man.

Numerous cuts illustrate the different methods, and simple text explains them. A full index of plants makes the information applicable to specific plants. It is a time and money saver for the propagator. The price is \$1.35 post-paid.

Obituary.



REAR ADMIRAL AARON WARD

Rear Admiral Aaron Ward, U. S. N. (retired), died suddenly at home at Roslyn, L. I., N. Y., on July 5th.

Admiral Ward was widely known among nurserymen and florists through the rose that bore the name of his much loved wife, Mrs. Aaron Ward.

His garden at Roslyn contained a fine collection and was a Mecca for rose growers from all over the world.

Horticulture owes much to such men who make gardening or some branch of it their hobby.

The Admiral has left behind him a name famed in both the arts of peace and war.

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by

THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance	\$1.50
Foreign Subscriptions, in advance	\$2.00
Six Months	\$1.00

Advertising rates will be sent upon application. Advertisements
should reach this office by the 20th of the month previous to the date
of issue.

Payment in advance required for foreign advertisements. Drafts
on New York or postal orders, instead of checks, are requested by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., August 1918

Subscribers to "Nurserymen's Fund for Market Development"

It is surprising how uniformly suc-
cessful have been the war gardens
all over the country.

Just how much is due to the education given the child-
ren in the public schools, the large percentage of foreign
born population, who are usually all more or less ac-
quainted with the practice of gardening, or the news-
papers and horticultural press generally, the fact re-
mains we are all more or less gardeners by instinct, per-
haps we ought to give the credit to our first ancestors.

It is true that occasionally we hear of a novice planting
Petunia seed six inches deep, or buying a pound of carrot
seed to sow a 25 foot row, but these exceptions are so rare
in comparison with the uniform success, as to be not
worth mentioning. The surprise is how eminently suc-
cessful the war gardens are.

It is not very far fetched to say the main difference be-
tween a rank amateur and a professional gardener is
mainly in the knowing how to work, and the present con-
ditions are teaching people how to do that.

From a gardening point of view this war is proving a
blessing, as it is driving home that truth which was nearly
lost sight of, namely "That all wealth comes from labor
and land."

If we may compare the state of two countries before
the war, America and England, we find England misused
her land, so much was devoted to game preserve, lawns,
golf courses, pastures, etc., that should have been tilled.

It required a world war to teach her that such misuse
was a national danger to the country as the proper use of
land is the prime source of wealth, and the first link in
the whole chain of industries.

America, the war has taught how much the world was

depending on her food supply, and has brought us to
realize our danger was equally in our lax methods, waste-
fulness and carelessness, in not permeating the country
with a complete system of agricultural and horticultural
education.

The war was a costly lesson, but is teaching us well.

With a population whose interest in gardening has be-
come so largely stimulated, is the nursery business pre-
paring to cater to it? These are war times when every
ounce of strength has to be devoted to subduing the
enemy. At its close, the nurserymen's war will begin, to
supply the nation and world with his products. The de-
mand will be enormous.

THE MARKET DEVELOPMENT MOVEMENT

The action taken on this movement
at the Chicago Convention is a step
in the right direction, but only a step,
and from every viewpoint, might be
considered a very short one, al-
though it may be that when the way is opened out more
clearly than at present, the movement will develop very
rapidly. In fact, there is every reason to suppose that it
will.

When one looks at what has been done in other lines,
the nurseryman seems excessively cautious, perhaps
some will say prudent. If we compare the nurseryman's
products, and how essential they are to the welfare of
the country, with some of the goods which have had so
many millions spent on them in advertising so success-
fully, it does seem as if the nurseryman is slow.

For instance, take the Eastman Kodak Co., which in-
vests at least one million dollars per year in advertising,
or the history of the Wrigley Chewing Gum industry,
which is said to spend two million dollars each year in
publicity, or even one brand of soap, Sapolio, which had
three or four hundred thousand dollars a year to talk
for it. Then there is the Diamond Dye business which
has been spending perhaps two hundred thousand dol-
lars per year for advertising, and many other such like
industries, that are not nearly so essential as the nur-
seryman's products, yet because they have had bold ad-
vertising, with a leader with brains, energy and a vision
to guide them, have reached a very high position in the
business world.

With so many object lessons to guide us, is there no
one big enough and bold enough to do the same thing for
the nursery business? Instead of having hundreds of
small businesses scattered over the country, each one in
detrimental competition, bearing down prices, and doub-
ling and trebling costs of transportation and production,
is it not feasible to bring them all under one guiding
hand to their mutual advantage, and to the great advan-
tage of the consumer?

This is the age of big things and it is no compliment to
be too conservative and slow, when the way is clear and
the path is straight.

The National Association is a body of men that works
largely through its committees. It is a true saying that
a committee is a body of men that takes twice as long to
accomplish something as it does a single individual.

What the nursery business wants more than anything
else at the present time is a Schwab to organize it upon

modernized lines. The man is somewhere if he can be found. Perhaps he has already started. Let us hope so, and in the very near future the business will take its place upon the plane it deserves to be.

WOMEN To write under such a heading as "women" in a nursery trade paper a few years ago would hardly have been considered appropriate.

This has all been changed now and they have to be reckoned with in nearly all branches of business and trade.

American travelers of a few years back when they saw the women of Europe working in the field alongside the beasts of burden would thank God they were Americans. It was usually the old women and very poor that aroused pity and perhaps indignation that such things had to be. Today they are admiring the youth, beauty and wealthy doing the same thing and are inspired by it.

Under proper conditions there is nothing finer or better both for themselves and the country. At present working in gardens and on farms along with works of charity is beginning to be recognized as the aristocratic occupation of America.

To work with the soil is elevating and it will be a pity, if after the war the view point changes.

Everything should be done to encourage an enduring interest. Students of the history of Horticulture appreciate how much the science owes to the wealthy hobbyist and dilettante, men like the late Rear Admiral Aaron Ward and thousands of others who have left their impress on the improvement or popularity of some particular class of plants.

"KNOCKING" It is a poor kind of man who tries to boost his own business by knocking his competitor. It shows a sad lack of enterprise or initiative, and indicates a mind so sterile of good qualities that instead of advancing his interests, the listener or reader is usually filled with disgust.

It is happily a practice of the past, as no up-to-date nurseryman or any other concern would stoop to such despicable methods, and a salesman on the road who follows such a practice soon has to seek another job.

It still persists, however, among inefficient salesmen, ignorant advertisers, backwoods journalism and expiring businesses. The public is too intelligent to be fooled by such a shallow practice, as they immediately recognize that a person who has to blow his own horn rarely produces the goods.

The spirit of the times is helpfulness and co-operation and those who do not get in line are not in step with the progress of the present day.

One has only to read the address of J. R. Mayhew, president of the National Association, at the Chicago Convention to catch the true spirit of the times. It is more than co-operation. A better term would be common-sense Christianity.

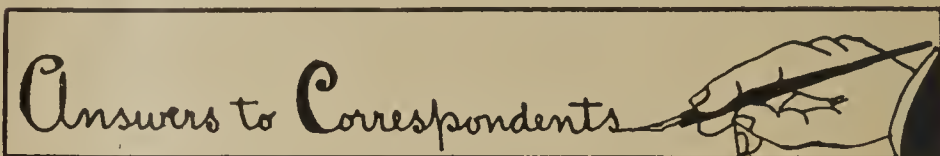
The recent reports from the front have put more heart in the nursery business and will enable us to "carry on" in spite of the weeds, promissory notes and other discouraging conditions.

It brings the glorious future appreciably nearer.

Mr. William Pitkin in his report of the legislative committee to the American Association, very aptly calls attention to the necessity of the Department of Agriculture developing the growing of fruit stocks in this country before an embargo is placed on the foreign supply.

While there is little doubt that all the necessary stocks can be raised in this country, it will take time, much money and special training before it can be accomplished in such a way as to make us independent of imports.

The fruit industry is so fundamental that such work should necessarily be done by the government.



The National Nurseryman,
Flourtown, Pa.,

Kindly advise me if you think this a good time to build up a good business in the nursery line and if you think I could get some of your advertising patrons to furnish me with stock in a small way until I can get established. I can furnish reference if required.

Kindly enter my name on your list of subscribers and send me bill for subscription price.

I am,

Yours very truly,

W. B.

July 23, 1918.

No one is absolutely sure of the future, but we cannot imagine a better time to begin to build up a nursery business. Since the war started there has been a great curtailment in the production of nursery stock, due to disturbed conditions and the fact that practically all capital and labor have been directed into channels pertaining to the war industries.

This will cause a very general shortage at the close of the war of nursery stock, when there is every reason to believe that the demand will be enormous.

In the ornamental lines the suspension of building of country homes, the laying out of parks, and all that kind of work, that calls for large quantities of plants, has not caused a surplus of stock to accumulate, but it has caused an accumulation of such work to be done as soon as labor and materials are released for the purpose.

The same may be said of the fruit tree industry, production has been largely reduced by the war, yet the need for more fruit has increased tremendously all over the world. We have not the slightest doubt that if you will write to our advertisers, furnishing the necessary reference, they will enter into business relations with you.

We appreciate your order for our Journal and trust you will receive much profitable information from its pages.

England's Famous Forests Sacrificed to the Needs of War

Nature Wears Another Aspect in the Once Splendidly Wooded Sections—Munition Workers Contribute an Airplane

Although the Germans have not set foot in England and the horrors of invasion have been spared the country, nevertheless its natural aspect is undergoing a great change due to the war. The beautiful woodlands, forests, woods and groves that for centuries have made its landscape of unrivalled beauty are fast disappearing under the axes of the Government's lumbermen. It is only a question of time, according to the report of the forestry sub-committee of the Reconstruction Committee, before the whole of the country's growing timber which is fit for commercial use must disappear. Even if every acre felled is replanted, it will be many years before the present output can be repeated.

It is estimated that by the summer of this year the Government and the lumber trade will probably be converting trees into timber at the rate of 6,000,000 tons per annum, or more than half of our total imports of timber in the last year before the war. Indeed, the need of timber is so great and imperative that it is feared by the end of next year the Government will have to cut all the remaining substantial blocks of mature coniferous timber in the country. And by substantial blocks is meant any patches of any size whatever suitable for cutting. It is only too probable that this destruction of the beautiful woods of England will have to go on to the bitter end, as the demand for timber is a continuous and compulsory one so long as the war lasts.

Fortunately, the Government is taking all possible steps to replace the trees. These efforts are among the most notable feats of organization during the war. They have resulted in the transplantation to this country of many lumbermen's camps from Canada, Newfoundland and the United States, where the forestry theories and practices of the far away virgin forests are being applied to English woodland.

In the meantime the woods of England continue to go. What it means in a given district is illustrated quite close to London, at Farnham in Surrey, less than forty miles from the capital.

This district has been bled almost as much as any in the south, and what has been done is but a foretaste of what must follow. For miles it is hardly possible to be out of sight of areas which have been completely cleared or are littered with freshly gashed and trimmed trees or of woodlands in which the standing timber is already marked for destruction. From Crooksbury to Tilford, to Churt by Frensham and back to Farnham, everywhere is the same picture of destruction; forests cleared except for a shelter belt to protect new saplings, entire woodlands gone save for a few marked trees, trunks, and logs in thousands lying where they fell and awaiting removal.

At Blacklake a new camp is being erected for Canadian lumbermen who will cut down the tall red tufted pines and lay bare a great swath of country from the Farnham road across the woods of Waverley and Moor

Park to Crooksbury Hill itself. This is just one example of what is going on all over Great Britain, Welsh, Scotch and the Lake country vales, that is, the Vale of Conway and the Vale of Llangollen and certain parts of Cumbria, show the forest loss most because whole mountains have been cleared and the destruction is most apparent on high country. In Devonshire great areas have been cut down to the north of Exmoor and many other localities, and several companies of the Canadian Forestry Corps are working in the country.

In the New Forest there has been a very heavy cut of the fine old timber. In Bedfordshire the woodlands of the Duke of Bedford and of Viscount Peel have suffered tremendously. Virginia Water, Windsor Forest and the Sunningdale region have been cut over by Canadian lumbermen, who are also cutting near Wellington College and Sandhurst, as well as on the South Downs in Earsham Woods. In Suffolk and Norfolk the forests are falling rapidly. Historic seats are not spared. The woods of Beaulieu have been well cut out and the magnificent silver firs at Longleat in Wiltshire, many of them six feet in diameter, are falling. From the magnificent high forest of Spanish chestnut trees at Welbeck Abbey at least a million feet are to be cut.

These details give but a faint suggestion of what is going on from one end of Great Britain to the other. Without having put foot on England the destructive influence of the Germans is seen in the disappearance of its incomparable woodland beauties. It has been largely due to its trees and woodlands that England has always ranked among the most beautiful of European countries. Its climate and its extraordinary variety of soil have been peculiarly favorable for the growth of trees in unusual variety. Its freedom from great extremes of heat and cold have made it the home of trees unknown in many parts of northern Europe. In its limited area a greater variety is to be seen than can be observed in immensely larger areas on the Continent.

In a journey of fifty to eighty miles from London to the Channel one finds hedgerow elms, thorns and oaks of the meadows, silver birches, chestnuts and many conifers of the lower commons; the willows, alders and poplars of the valley; the ancient thorns and hollies of the higher commons; the beechwoods of the North Downs; the white bean, yew, juniper and box on the greens and ridges and the forests of mighty Scotch pines, silver firs, larch and the great oaks of the Weald; the conifers and chestnuts of the Hastings sand forest region, and then the elder, ash and thorn of the eastern end of the South Downs, and the beech, birch, sweet chestnut, ash and mighty yew at their western end. And this variety is not only typical of the nearby counties, but more or less of all England, Scotland and Wales.

With the exception of certain exotic trees brought here and there, perhaps by the Romans, it is pretty clear

that the trees down to the seventeenth century were all native. In that century the conifers were introduced, and Develyn, the great authority on British forestry, includes in his list the Scotch fir, the only native of the family, the silver fir, the Weymouth pine, the spruce and the larch. In the eighteenth century large plantings were made of the larch. This introduction of the larch and other conifers not only added new features to the beauty of the English woodlands, but also has proved to be as great a resource of England at war as the hearts of oak of old.

While most of England's woodlands had been created primarily for game coverts and landscape effects, state forests have for centuries been cultivated to meet the needs of the navy. The oak of the Forest of Dean has been known as the best ship timber in the world, and English oak is still the finest for that purpose, while the best of the soft woods, spruce and pine, is second only to the finest woods produced in northern Europe.—*New York Sun*.

A HARDY CALIFORNIA PRIVET HYBRID

Some ten years ago in one of the New Haven, Connecticut public parks it was noted in the fall, that a plant of California Privet, growing in a cluster of the Ibota Privets, hung heavily laden with fruit which was an unusual sight. In speculating as to how this occurred, it was suggested that perhaps a sufficient affinity existed between the two species to be favorable to hybridizing, and that this fruitfulness was due to such an affinity. It further suggested itself that if this had really occurred, the hybrid seedlings might result in plants, some of which might carry the general appearance of the California Privet and bear some of the hardiness of the Ibota parent. Seeds were accordingly gathered and planted, which germinated freely the following spring. Some thousands of them found their way by transplanting, into a test garden, there to be given a chance to develop. A more interesting and miscellaneous lot could hardly be imagined.

About twenty-five per cent of these seedlings lacked in vigor and perished the first summer. Another twenty-five per cent showed marked variegation, white and yellow with the green and were of no special interest. About ten per cent developed into vigorous lusty plants, no two being very similar, either in growth or character of foliage, some being quite upright and resembling California Privet so closely that they were seemingly identical, others being quite as spreading in their habit as the "regal" form of Ibota. When the frosts of fall time came along the California Privet habit of retaining foliage late proved a characteristic of a number of the plants, while some of the seedlings matured their foliage even before the frost.

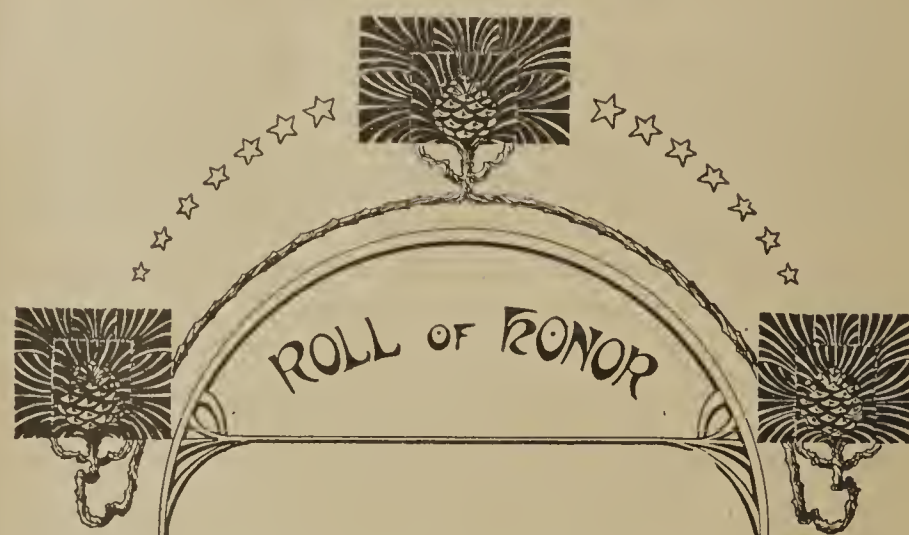
The third year these seedlings varied in height from one foot to ten feet, and while they had shown a remarkable diversity in habit of growth, their character of flowering was equally variable. Many showed the characteristic terminal flower cluster of California Privet, while others bloomed in short panicles along the stem of the preceding year's wood as the characteristic Ibota. Others, with varying intermediate forms in this respect.

The fall of that year gave another surprise in the character of fruit, which varied from large brilliant, black, glossy, grape-like clusters in some instances; to the bluish lead effect of Ibota. A more interesting row of experimental privets could hardly be found.

It was interesting to ask visiting horticulturists to identify these privets. Three or four of them resembled very closely California Privet in their general appearance and hedges made from two-year-old cutting plants of several of these could not be distinguished from a California Privet hedge.

The final test of the value of these hybrids was the possibility that some one or more of them would prove hardier than California Privet, but until last winter no severely cold enough weather had been experienced to test this out satisfactorily. Last winter was certainly the required test, as California privet hedges all along the Atlantic seaboard suffered severely, in many instances being killed outright. The same diversity which had characterized the seedlings all along asserted itself in the matter of hardiness. A number of them winter-killed outright, the majority of them suffered more or less severely, but some ten lived to the very tips without any injury whatever. Among these, which survived without injury, are a number which resemble California Privet very closely in habit of growth and dependability for hedge purposes. This being the case, a strictly hardy California Privet hybrid is already an accomplished fact.

Whether it is worth while for one or more of them to be disseminated has not yet been decided. The party who accomplished this hybridizing is anxious to know the nurserymen's opinion as to the probable commercial value of these hardy hybrids.



IT is the purpose of the National Nurseryman to publish a roll of honor consisting of the names of those nurserymen serving in the United States army in the present war. We shall appreciate it if our readers will send us their names and photographs if possible.

Albert G. Allen, Cadet, Flying Squadron, Park Field, Memphis, Tennessee. Member of firm of W. F. Allen Company, Salisbury, Maryland.

Howard E. Andrews, U. S. Signal Corps, France—Landscape Department, A. W. Smith Co., Pittsburgh, Pa.

Carroll A. Bagby, Capt. U. S. Infantry—New Haven Nurseries, New Haven, Mo.

Harold J. Bagby, Enlisted Medical Reserve Corps—New Haven Nurseries, New Haven, Mo.

Lew. W. Bagby, Lieutenant (Junior Grade) U. S. Navy—New Haven Nurseries, New Haven, Mo.

Oliver W. Bagby, Lieutenant, U. S. Navy—New Haven Nurseries, New Haven, Mo.

Ralph B. Bagby, Lieutenant 21st U. S. F. A., Fort Riley, Kansas—

New Haven Nurseries, New Haven, Mo.
 Robert E. Bagby, Cadet, Senior Class, United States Military Academy—New Haven Nurseries, New Haven, Mo.
 Marvin T. Carter, Royal Palm Nurseries, Oneco, Florida.
 William B. Carter, Royal Palm Nurseries, Oneco, Florida.
 John H. Chattin, Aviation Section of the Signal Reserve Corps, San Antonio, Texas. Secretary and Treasurer of the Winchester Nursery Company, Winchester, Tenn.
 David Collins, Royal Palm Nurseries, Oneco, Florida.
 Rupert K. Courtoy, Royal Palm Nurseries, Oneco, Florida.
 Harold C. Cowell, 224th Aero Squadron, Kelly Field, San Antonio, Texas. Swan River Nurseries, Patchogue, L. I., N. Y.
 Bethel Drymon, Royal Palm Nurseries, Oneco, Florida.
 Clinton Drymon, Royal Palm Nurseries, Oneco, Florida.
 R. E. Drymon, Royal Palm Nurseries, Oneco, Florida.
 William B. Drymon, Royal Palm Nurseries, Oneco, Florida.
 William Flemer, Jr., Private U. S. Expeditionary Force, Ambulance Corps, Battalion No. 23, Section No. 23, France. F. & F. Nurseries, Springfield, N. J.
 Clarence J. Galligan, 2nd Co., U. S. C. A., Fort Adams, R. I.—The Elm City Nursery Co.
 Dean Grauer, Royal Palm Nurseries, Oneco, Florida.
 Ralph Griswold, Royal Palm Nurseries, Oneco, Florida.
 Melvin Head, Royal Palm Nurseries, Oneco, Florida.
 Stout Hill, Royal Palm Nurseries, Oneco, Florida.
 John B. Hinson, Royal Palm Nurseries, Oneco, Florida.
 David L. Hires, Royal Palm Nurseries, Oneco, Florida.
 Edwin Hoyt, 1st Lieutenant of the Field Artillery, Officers' Reserve Corps, now stationed at Camp Grant, Rockford, Ill.—The Stephen Hoyt's Sons Co., Inc., New Canaan, Conn.
 Jackson & Perkins Co., of Newark, N. Y., have hung out a service flag with four stars in it. The stars represent:
 P. V. Fortmiller, Ordnance Department, Washington.
 Loren G. Olmstead, Sergeant, Camp Gordon, Ga.
 Clarence G. Perkins, Naval Radio School, Newport, R. I.
 Stuart Perkins, Chief Petty Officer, Naval Aeronautic Station, Miami, Fla.
 Thomas Jones, Royal Palm Nurseries, Oneco, Florida.
 Henry Edward Kelley, 1st Lieutenant, Company C, 165 Infantry, American Expeditionary Force, now in France.—The Stephen Hoyt's Sons Co., Inc., New Canaan, Conn.
 William P. Langdon, Third Officers' Training Camp, Yaphank, N. Y.—The Elm City Nursery Co.
 Private Frank S. La Bar, Company A., 309th Infantry, Camp Dix, N. J. LaBar's Rhododendron Nursery, Stroudsburg, Pa.
 Lee Lesley, Royal Palm Nurseries, Oneco, Florida.
 Robert J. McCarthy, Sergeant, 101st Machine Gun Battalion, American Expeditionary Force now in France.—The Elm City Nursery Co.
 Albert F. Meehan, Third Officers' Training Camp, Yaphank, L. I., N. Y. Member of firm Thomas B. Meehan Co., Dresher, Pa.
 Wade Muldoon, Sergeant, Headquarters Military Police, Camp Hancock, Ga.—Thomas Meehan & Sons.
 Roy W. Nixon, Royal Palm Nurseries, Oneco, Florida.
 Mack Overstreet, Royal Palm Nurseries, Oneco, Florida.
 Paul Rathert, Battery F., 128th U. S. F. A., Ft. Sill, Oklahoma, New Haven Nurseries, New Haven, Mo.
 Norman A. Reasoner, Signal Corps, Aviation Section, San Antonio, Texas. Royal Palm Nurseries, Oneco, Florida.
 Meredith P. Reed, Captain, Sixth Company Section U. S. Officers' Reserve Corps.—Vincennes Nurseries, Vincennes, Indiana.
 John Thomas Rogers, son of Thomas Rogers, Cooper & Rogers, Winfield, Kansas, joined the colors on the 15th of July, entered Mechanical Training school, Manhattan, Kansas.
 Philip Rouse and Julian Rouse, nephews of the Smith Brothers, now in the Naval Reserve, with headquarters at Jacksonville, Fla.
 Charles Schwentker, Battery F, 128th U. S. F. A., Ft. Sill, Oklahoma—New Haven Nurseries, New Haven, Mo.
 Charles R. Smith, Aviation Section of the Signal Reserve Corps, Aviation Camp, San Antonio, Texas.—Smith Bros. Nursery Company, Concord, Ga.
 Lawton V. Smith, nephew of the Smith Brothers, of Concord Nurseries, of Concord, Ga., now a lieutenant in the Aviation Section of the Army, and stationed near Toronto, Canada.
 Clay M. Stark, Stark Bros. Nurseries & Orchards Co., Louisiana, Missouri. American Field Service. Now in France.
 Lloyd C. Stark, Major of the Field Artillery, Fort Sill, Okla. Vice-President and a Director of Stark Bros. Nurseries and Orchards Co., Louisiana, Mo. President of the National Association of Nurserymen.
 Otto Sweat, Royal Palm Nurseries, Oneco, Florida.
 George Taylor, Battery "F," 108th U. S. F. A., Camp Hancock, Georgia.—Thomas Meehan & Sons.
 Ray R. Thompson, Royal Palm Nurseries, Oneco, Florida.

Alfred E. Tull, Royal Palm Nurseries, Oneco, Florida.
 Edmond Wallays, Royal Palm Nurseries, Oneco, Florida.
 W. R. Wedge, Royal Palm Nurseries, Oneco, Florida.
 Stanley V. Wilcox, Co. E. 103rd Engineers, Camp Hancock, Augusta, Ga. Thomas Meehan & Sons, Germantown, Pa.
 Claud Wilson, Royal Palm Nurseries, Oneco, Florida.
 Luther C. Wilson, Royal Palm Nurseries, Oneco, Florida.
 John T. Wilson, Royal Palm Nurseries, Oneco, Florida.
 William Whitted, Royal Palm Nurseries, Oneco, Florida.
 EMPLOYEES OF WILLIAM H. MOON COMPANY, MORRISVILLE, PA., WHO HAVE JOINED THE COLORS
 E. Wright Peterson, Sgt., Q. M. C. Base Hospital, Camp Meade, Md.
 H. B. Fiske, Y. M. C. A. Hut No. 2, Camp Dix, N. J.
 Harold C. Black, E. O. C. N. A., Supply School Ordnance Training Camp, Camp Hancock, Ga.
 Harry B. Carter, Co. D., 317th Infantry, A. E. F.
 Leonard Coulton, Co. C., 310th Machine Gun Bat., A. E. F.
 Leroy Robinson, Co. B., 368th Infantry, A. E. F.
 Wendell Oliver, Headquarter's Detachment, 153 Depot Brigade, Camp Dix, N. J.

BULLETINS OF INTEREST TO NURSERYMEN

The Citrus Thrips. By J. R. Horton, Scientific Assistant. Pp. 42, pls. 3, figs. 10. Contribution from the Bureau of Entomology. (Professional Paper.) Feb. 14, 1918. (Department Bulletin 616.) Price, 10 cents.

A description of the damage done in California by thrips, and suggested methods of preventing same.

Orchard Injury by the Hickory Tiger-Moth. By Dwight Isely, Scientific Assistant, Deciduous Fruit Insect Investigations. Pp. 16, pls. 3. Contribution from the Bureau of Entomology. (Professional Paper.) Feb. 4, 1918. Department Bulletin 598.) Price, 5 cents.

Describes habits and life history of the insect, and suggests means for its control.

PLANT-TESTING STATION IN SCOTLAND

It is announced that the Board of Agriculture for Scotland has decided to establish a station for the testing and registration of agricultural plants. It is proposed to lease for this purpose a suitable farm of 200 to 250 acres within easy reach of Edinburgh. The station will be controlled by the Board of Agriculture, assisted by a representative committee, and the work undertaken will include (a) the testing of all kinds of agricultural seeds with a view to ascertaining the cropping powers of the different varieties; (b) the testing of one variety against another and against standard varieties; (c) the testing of new varieties with a view to discovering whether they really differ from existing varieties; (d) the determination of synonyms; (e) tests for the purpose of ascertaining the disease-resisting powers of the different varieties; (f) in the case of roots, tests to ascertain the intrinsic qualities of the different varieties for feeding purposes. The station will issue certificates of registration on the results of the tests made.—*Daily Commerce Reports*.

Can you think of a carpenter who has no hammer? It would be like a nurseryman without the National Nurseryman.

MARTIN FRISSEL,
 Muskegon Heights, Mich.

Notes from Arnold Arboretum

THE ENGLISH ELM. In the discussions of the English Elm which occasionally appear in the Boston papers surprise is expressed that different individuals of this tree differ in general appearance and in the size of the leaves, showing perhaps that it is not generally known that there are four distinct species of Elm-trees now growing naturally in England. This confusion in regard to these trees is of long standing, for Linnaeus one hundred and sixty-five years ago believed that all the Elm-trees of Europe were of one kind to which he gave the name of *Ulmus campestris*, a name which must be abandoned as the four British trees and an Elm-tree of northern and eastern Europe are included in his description.

ULMUS PROCERA. This is the name now adopted for the tree which is generally known as English Elm in Boston where it has proved one of the best foreign trees ever planted in Massachusetts. It has been growing here for more than a century, and nearly one hundred years ago Major Paddock had a nursery at Milton for the propagation and sale of this tree. Probably no tree, native or foreign, which has been planted in the neighborhood of Boston has grown to such a large size. The Paddock Elms, which stood on Tremont Street in front of the Granary Burying Ground were of this species, as were the great Elms on the Tremont Street Mall of the Common which were killed by the Subway. The Elm-trees on each side of the Shaw Monument opposite the State House are of this species, and there are still large specimens in the suburbs of the city. This is the common Elm-tree of southern England where it grows usually in hedge-rows, although it has been largely planted in parks. It often grows one hundred feet tall with a massive stem covered with dark deeply furrowed bark, spreading or ascending branches which form a comparatively narrow oval head, and slender branchlets thickly covered during their first year with down. The leaves are broadly oval or ovate, oblique at the base, dark green and rough on the upper surface and covered below with soft down; they are from two to three inches long with about twelve pairs of veins, and their stalks are only about one-fifth of an inch in length. This tree very rarely ripens fertile seeds in England or in this country, but it produces suckers in great numbers and is propagated entirely by means of these. As this tree so rarely produces seeds few varieties are known, but a small-leaved Elm (var. *viminialis*) is believed to be a seedling of it. Of this little Elm there are forms on which the leaves are blotched with white and with yellow.

ULMUS FOLIACEA, OR NITENS. This is another English Elm which differs from the last in its paler bark, in its smooth or nearly smooth branchlets, that is without a covering of down and in its leaves which are smooth and shining on the upper surface, only slightly downy below early in the season and from two to three and a half inches long. This tree produces fertile seeds in abundance and seedlings are raised in European nurseries.

It is widely distributed over central and southern Europe and grows also in northern Africa and eastern Asia. Several geographical forms are recognized; the most distinct of these are the Cornish and the Guernsey Elms which are trees of medium size with erect growing branches which form a narrow pyramidal head. Plants of these two forms are not always hardy in Massachusetts. Another form, common in Hertfordshire, is a large tree with wide-spreading and pendulous branches and at its best, although not so tall, is almost as handsome as our American White Elm (*U. americana*). Another form (var. *umbiculifera*) from Persia and Armenia is interesting from its compact globose head. This tree might perhaps be made useful in formal gardens. On many trees of *Ulmus foliacea* the branches are furnished with corky wings (var. *suberosa*), and the so-called English Elms with such branchlets occasionally seen in this country are usually of this variety. The seedling trees of this Elm which have been imported from European nurseries vary in habit, in the size of their leaves and in their hardness; and the unhealthy and generally unsatisfactory Elm-trees which have been planted in considerable numbers in eastern Massachusetts during the last twenty years are in nine cases out of ten seedling forms of *U. foliacea*.

ULMUS GLABRA. This is another widely distributed European Elm which is often called Scotch Elm or Wych Elm by English-speaking people. This is a tree with a trunk and branches which remain smooth for many years. It can always be recognized, too, by the large obtuse buds covered by pale brown hairs and by its dark dull green leaves abruptly pointed or three-lobed at the apex, oblique and unsymmetrical at the base, rough above, downy below and from four to six inches long with stalks shorter than those of other Elm-trees. This tree does not sucker but produces fertile seeds in great quantities, and more abnormal seedling forms of this tree have been raised than of any other Elm. The well-known Camperdown Elm is a form of this tree with regularly pendulous branches which is often planted in suburban gardens to make natural arbors; another form (var. *pendula*) has horizontally spreading pendulous branches which form an unsymmetrical, flat-topped head. There is a form with erect branches forming a narrow pyramidal head and others with leaves more coarsely toothed than those of the ordinary form and with purple and other abnormal leaves. This is perhaps the least beautiful of all the species of Elms. The abundant seeds are blown great distances and germinate so readily that seedlings are often troublesome weeds which if neglected for a few years become difficult to eradicate. For several years the leaves of this tree in the neighborhood of Boston have been turned brown and often killed by a leaf-mining insect which attacks this species but no other Elm-tree.

ULMUS MINOR, sometimes called *U. sativa*, is a small-leaved Elm-tree of large size which is rather closely re-

lated to *U. foliacea*. Although common in the eastern counties of England, it is possible that this tree cannot be seen in the United States outside of the Arboretum.

ULMUS HOLLANDICA. This general name has been given to a race of natural hybrids between *U. foliacea* and *U. glabra*, among which are some of the handsomest and most valuable of the European Elms. To the best known in this country of these hybrids the name *Ulmus hollandica vegela* has been given. This tree was raised in a nursery at Huntingdon about the middle of the eighteenth century and is usually called the Huntingdon Elm. This tree often grows one hundred feet high with a massive trunk and spreading and ascending branches which make a vase-shaped head which readily distinguishes this tree from other Elms. It can be seen to good advantage in Cambridgeshire, England, especially in Cambridge, where there is a noble avenue of the Huntingdon Elm. A tree of this hybrid which grew in the grounds of Magdalen College at Oxford was believed to be the largest tree in Great Britain. In April, 1911, this tree was blown down and was found to be one hundred and forty-two feet high with a trunk twenty-seven feet in circumference at five feet above the ground. In this country this hybrid Elm grows more rapidly than other Elm-trees, and as it produces suckers it can be easily multiplied. It is not common here, however, although in the neighborhood of Boston specimens not more than sixty years old have already grown to a large size. The var. *belgica* of this hybrid is the Elm which has been most often planted as a street and roadside tree in Belgium and Holland. It is a tall tree with a straight, rough-barked trunk, a broad head of rather erect branches, and dark green leaves slightly roughened above and covered below with soft down. As this tree grows in Holland it is one of the handsomest and most desirable trees for shading city streets. This Elm appears to be little known in the United States; it is growing well in the Arboretum, but it has not been here long enough yet to show if it will be of permanent value in New England. The so-called Dutch Elm, *Ulmus major* of many English dendrologists and a common tree in English parks, is probably another hybrid of the same parentage (*U. hollandica* var. *major*). This is a very large tree with a short trunk covered with rough bark, wide-spreading branches furnished with corky wings, and dark green leaves lustrous and nearly smooth on the upper surface and slightly downy below. As this tree produces many suckers it can be easily multiplied.

ULMUS LAEVIS. This is a common Elm in northern Russia and in some parts of Scandinavia, and occurs occasionally in Denmark and the Balkan countries. It has been growing in the Arboretum since 1888, and is now fifty-five feet tall with a short trunk, a broad pyramidal head and dark green foliage. Botanically this Elm is closely related to the American White Elm (*Ulmus americana*) but differs from it in the thicker coat of down on the lower surface of the leaves and in its larger and sharper-pointed buds. The leaves of this tree unfold here earlier than those of any other Elm. It is probably extremely rare in the United States, but American tree lovers can wisely learn more about it.

The Arboretum Collection now contains sixty-two different Elms and includes all the known species with the exception of the four Himalayan Elms and the Mexican

Elm which are not in cultivation and two species from the southern United States which are not hardy here. With few exceptions the important and interesting varieties and hybrids are represented in the collection. Many of the plants are still too small to produce fruit or to show the habit of mature trees, but as a whole the collection offers a good opportunity for the study of the leaves and branchlets of Elm-trees.

A GOOD RHODODENDRON. To a Rhododendron which is growing in Mr. Hunnewell's garden at Wellesley the name of Glennyi has been given. This name is probably not correct, at least it is not found in the catalogues of garden Rhododendrons. There was once, however, in England a Mr. Glenny who raised hybrid Rhododendrons, for on the 5th of February, 1838, at a meeting of the Royal Horticultural Society in London, "Mr. George Glenny exhibited a Rhododendron said to have been raised by himself from seed. It did not appear different from a variety raised some years since by Mr. Waterer, of Knaphill, and called in the gardens *R. pulcherrimum*. It is said to have been a hybrid between *R. arboreum* and *R. caucasicum*, and was raised at Knaphill in 1832; it has pink flowers." The plant in Mr. Hunnewell's garden is evidently a hybrid of *R. caucasicum*, and has been growing there for fully fifty years. The original specimens were certainly imported from England and are now round-topped bushes about six feet high. For at least thirty years they have never suffered from heat or cold and have never failed to bloom freely. The leaves show the influence of *R. Catawbiense* but the size of the flower-clusters and the size of the white flowers, which are a good deal like those of *R. Boute de Neige*, point to *R. caucasicum*. The early flowers, for this is one of the earliest of the hardy Rhododendrons to flower in this climate, show too the *caucasicum* influence. But whatever name it should bear and whatever its parentage this Rhododendron is a valuable plant, for it is certainly one of the hardiest hybrid Rhododendrons which have been planted in this country. There are only small plants in the Arboretum Collection where it has not yet flowered.

CASTOR-BEAN GROWING IN SIAM

[Vice Consul Carl C. Hansen, Bangkok]

The castor-oil plant grows wild in almost every part of Siam, but hitherto it appears that no attempts have been made in its cultivation. However, an extensive plantation has now been started by a Bangkok merchant who expects to harvest about 1,000 tons of the seeds within five or six months after the planting, which is now in progress. It is the intention of this merchant to produce the oil here, and he has requested this consulate to put him in touch with makers of suitable machinery for this purpose. This office will therefore be glad to receive descriptive literature and price lists for such equipment.

Reminiscences of a Nursery Salesman

THE very prevalent idea that to be a successful salesman one must have unlimited cheek and a very thick hide does not seem to hold good in actual practice. A better equipment is a good knowledge of the business, tact in approaching people, and unlimited enthusiasm and belief that he is selling goods that will benefit the purchaser.

Selling to the trade is quite different to selling to the consumer. The trade is easily approached and to a certain extent knows what it wants, but in most cases the consumer has first to be interested and a desire created. Merely importuning people to buy is about as productive of good results as playing a piano by main force.

Personally I always found finding the prospects and getting a hearing the most difficult part of getting an order. To land in a town in mid-winter, unknown, with snow on the ground, requires quite a little courage and persistency to find prospective buyers. People are not in the humor to talk planting, yet this is really the best time to go after business, and if done systematically it is productive of results.

The man building a new home in the suburbs is invariably a good prospect if an intelligent proposition can be put before him. Then there is the constant buyer who takes a personal interest in his grounds.

There are few men who work in offices, especially among the better class, who have not a longing to try their hand at a chicken farm, orchard or some interest connected with the soil, and the man who knows trees and plants is usually welcome if they can be approached at the right time and in the right way.

During a trip in the south, I recall an instance where a customer told me of a prospect who had just built a new home in a small country town. It was an out of the way place and I could not afford to lose a day to investigate. I found however, there was a train that would land me there at nine in the evening and a through train that left at midnight, by which I could continue my journey.

Landing at the small town at nearly 10 p. m. I went stumbling along unlighted and unpaved streets trying to find my prospect. Everyone seemed to be in bed or just about ready to go.

My spirits were about at zero wondering if they would set the dog on me or have me committed to a lunatic asylum, as luck would have it when I eventually located the house, they advised me Mr. B. was still at his office further down the street.

Arriving at his office I presented my card and told him who I was, that I was train stayed until midnight and looked him up to see if I could not put the time in talking landscape gardening and plants.

We talked until midnight and he took me to the station

to see me off on the train with an order that approximated \$500.00.

The most unlikely times and places are often productive of results, the opposite is also true, where you are expecting big things it is not uncommon to have the biggest item on your expense sheet.

DITCHING WITHOUT HARD LABOR

By M. C. Potler, Iowa.

I believe in blasting ditches with dynamite where soil conditions are favorable. Strangely, the condition that is most favorable to blasting is about the most unfavorable for any other method. The condition that especially calls for the dynamite treatment is a wet swampy soil—in many cases, completely covered with several inches of water and oftentimes the difficulties further complicated by a net-work of roots, or cattail growth, or sunken logs, etc.

I blast ditches in this type of soil by what is known as the propagated method; that is, place a cap and fuse in the charge in a center hole and let that charge by shock communicate down the line of charged holes on either side of the center.

The spacing between holes must be governed by soil conditions. Thirty inches between holes is about the maximum distance that the method will work. It is best to try about five holes spaced at the maximum distance to begin with and see if it will clean out the ditch. If not, shorten the distance between holes until it is gotten right. Always aim to get the greatest possible distance between holes because by so doing the amount of dynamite is reduced and the cost kept down to the minimum.

I have just finished blasting a ditch by the method referred to. For the first time I have tried using forty per cent. straight N. G. dynamite. Heretofore I had always used the sixty per cent. graded but as that sells at retail for seven cents per pound higher than the forty per cent. I decided to try the latter to see how it would work. I find that with the exception that it does not give me quite so deep a ditch, it works just as satisfactorily in other respects. It will be readily seen that the substitution effects a very large saving in the costs.

In this case, I spaced my holes 15 inches apart, using two cartridges of the 40% straight N. G. dynamite to the hole. It gave me a ditch 7 feet wide at the top and 4 feet deep. The bore holes were punched about 3½ feet deep. No tamping was used because the holes filled with water over the charges.

Where the mud is softer, it is sometimes possible to get a ditch almost this depth by using one cartridge of dynamite to the hole, but when this is done the cartridge must not be placed in deep holes. About 2½ feet is the limit

of depth that can be successfully employed where but one cartridge is loaded to the hole.

There is no absolutely set rule to go by in blasting ditches. One must by practice and observation learn to judge soil conditions and to determine the proper spacing between holes, depth of holes, temperature of water, amount of dynamite to use per hole and the proper grade of dynamite. However, I have found it doesn't take long to become an expert ditcher if one is a close observer and thinks out his problems as he comes to them.

SOURCE OF SOME OF THE VEGETABLE DYES

The aniline dyes of which Germany had a monopoly prior to the war, have largely replaced the use of the vegetable dyes all over the world.

The latter are still used exclusively by the old Chinese rug makers, who, although masters in the art of color making, confined themselves to a very limited number of colors. In the use of blues and yellows the Chinese artisan doubtless stands pre-eminent. The use of the true imperial yellow is very rare, although an endless number of shades in this color are designated imperial. The reds sometimes have a yellowish tinge or hue. There are many shades of salmon pink and reds, the salmon pink being produced from species of redwood grown in western China.

The dyers of Ninghsia in Kansu are famous for their beautiful shades of red. This color is produced from a berry grown in Kansu Province. Red is also produced from redwood. Madder (*Rubia cordifolia*) is a creeper whose stems and roots when ground and boiled produce a red that is used as the basis of many shades. It is also said that some of the old craftsmen occasionally use sheep's blood to produce a deep vermilion. Perhaps the best known red dye in China is the safflower (*Carthamus tinctorius*), called the red flower by the Chinese. The seed of this flower is said to have originally come from Turkestan.

Brown comes from the dye yam, or shu liang, as the Chinese call it. It produces a dark brown color and is widely used in China in the dyeing of cloth. If a darker shade is desired gallnuts and alum are used. Acorn husks are sometimes used to produce this color.

Blue comes from the indigo plant. One of the many varieties which grows in China (*Polygonum tinctorium*) is grown in the northern Provinces. The majority of blues used by the Chinese have indigo as their basis, and this in combination with other materials produces all the shades known.

Purple is obtained from the hollyhock and from the bark of *Lithospermum erythrorhizon*. The coloring matter is brightest if the plant is dug early in the spring.

Yellow is obtained from the buds of a large tree known as *Sophora Japonica*, widely scattered over China. Locus seed also produces a yellow as well as an olive green.

Green dyes are obtained from *Rhamnus tinctoria* and other species of buckthorn. Indigo and yellow produce a green dye, but this color is very little used in Chinese rugs.

Black is obtained from gallnuts. When mixed with

cochineal and other substances, the powder from the galls produces gray, brown, and fawn tints. Black is also obtained from pomegranate rind and vinegar.

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FALL PLANTING

One of the commonest questions a nurseryman has to answer is, "When is the proper time to plant?" And he should do everything he can to encourage fall planting so as to extend the season of digging and shipping.

The spring planting season is much too brief but if the nurseryman will systematically encourage fall planting there is no reason why the fall sales should not be as large as the spring.

The average person interested in planting only thinks about planting in the spring, when vegetable life begins to awaken after the winter's sleep.

While, perhaps, most things may be planted at that time, it is by no means the best for all plants and all places, and those who take a real interest in their gardens and grounds would do well to consider the individual plant rather than the best general season.

Taking the deciduous trees and shrubs as a class they can be planted any time the leaves are off them, being from October until April, whenever the ground is free from frost.

Experience has taught us that some portions of this period are better than others for certain plants. Thick, fleshy rooted plants like the magnolias are more certain in spring, also certain plants that are somewhat tender and liable to have their tops winter-killed, and hardwooded trees like the beech and birch.

With other kinds the risk seems about evenly divided, and one has to choose between the danger of a hot, dry spell following spring planting and a severe winter following a fall planting.

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and the latter part of April to end of May.

Hardy herbaceous perennials may be planted either fall or spring, although there are quite a number of exceptions.

Most bulbous plants, such as Lilies, Narcissus, Tulips, Hyacinths, etc., may only be planted in the fall.

Paeonies are best planted in fall, and the rule applies generally to herbaceous perennials that bloom in early spring, except very tender kinds and very shallow-rooted ones.

Weather, soil and location have as much to do with deciding the best season as does the individual plant itself.

Some good points to remember are:

Plant in the fall if plants and conditions allow.

Avoid fall planting if the ground is heavy and undrained.

Avoid late spring planting in dry, hot, exposed positions.

By planting in early fall, so as to give the plants a chance to become established before the cold weather sets in, you will gain a year over late planting the following spring.

LONICERA PILEATA

This is an interesting little hardy trailing evergreen plant from China.

Observations of its behaviour made during the last winter lead one to believe it is exceptionally hardy. A large batch of plants came through the winter unscathed although they were growing under rather unfavorable conditions.

It suggests itself as a good plant for rock gardens and dry stone walls.

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Grower and Exporter of Fruit-Tree Stocks,
Forest Tree Seedlings, Rose Stocks, Shrubs,
Vines, and Conifers for Nursery Planting.

For all information as to Stocks, prices, terms, etc., address

Jackson & Perkins Co.

(SOLE AGENTS)

NEWARK, N. Y.

SCARFF'S NURSERY

Headquarters for
Small Fruit Plants
1200 Acres "At it 25 Years"

Strawberries	Currants	Rhubarb
Raspberries	Gooseberries	Asparagus
Blackberries	Grape Vines	Horseradish
Dewberries	Privet	Hardwood Cuttings
Berberry	Spirea	Butterfly Bush

100,000 transplanted Raspberry, Blackberry and Dewberry plants
for retail trade. See wholesale list before placing your order.

W. N. SCARFF & SONS

NEW CARLISLE

OHIO

We sell to THE TRADE only, and make a specialty of

**OREGON CHAMPION GOOSEBERRY
PERFECTION CURRANT
CLEAN COAST GROWN SEEDLINGS**

We also have growing for fall delivery a large assort-
ment of general nursery stock, including Fruit, Shade, and
Ornamental trees, Roses, Etc.

Head Quarters for Nursery Supplies.

Correspondence invited.

Portland Wholesale Nursery Co.

122 1/2 Grand Avenue,

Portland, Oregon

A Large Stock of Apple, Pear, Cherry and Peach Grape Vines, Blackberry and Raspberry Plants

And a general line of ORNAMENTAL TREES
and SHRUBS. All stock clean and thrifty, the
best that can be grown.

T. B. WEST, Perry, Ohio.

W. T. HOOD & CO. OLD DOMINION NURSERIES

RICHMOND

VIRGINIA

We offer for Fall 1918 and Spring 1919, general line of
Nursery Stock—California and Amoor River Privet, Norway
Maples, Oriental Planes, Evergreens, etc.

We will have a heavy stock of Peach Trees and Norway
Spruces on which we can quote attractive prices.

We expect to be in position to offer Natural Peach Seed,
crop of 1917. Send us your list for quotations.

W. FROMOW & SONS

Azalea mollis, Rustica and Ghent in all the leading varieties,
grown from layers not grafted.

Manetti Stocks clean and well rooted for grafting or open
ground.

Standard, Climbing, Weeping and Dwarf Roses in great variety
Rhododendrons, the cream of the Hardy American varieties.

Andromeda floribunda, japonica, and speciosa, bushy budded
plants.

Kalmia latifolia.

Green and River's Purple Beech in all sizes up to 12 feet.

Prices and full particulars on application.

WINDLESHAM NURSERIES

Surrey, - - - England.

ALL "AMERICAN NURSEYMEN"

Wishing to do business with Europe should send for the

"Horticultural Advertiser"

This is The British Trade Paper being read weekly by
all Horticultural traders. It is also taken by over 1000 of
the best Continental houses. Annual subscriptions to cover
cost of postage, \$1.00. Money orders payable at Lowd-
ham, Notts. As the H. A. is a purely trade medium appli-
cants should, with the subscription, send a copy of their
catalogue or other evidence that they belong to the nursery
or seed trades. Address

Editors of the "H. A." LOWDHAM, NOTTS,
ENGLAND

TREES

Largest assortment in New Eng-
land. Evergreens, deciduous trees,
both common and rarer varieties.
Sturdy, choice stock that can be
depended upon. Send for catalog
and special trade prices.

The Bay State Nurseries

North Abington
Mass.

SHRUBS

This New England soil and cli-
mate produce fine sturdy shrubs.
Special trade prices. By the thous-
ands, hardy Native and Hybrid Rho-
dodendrons—transplanted and accli-
mated. Send your lists let us est.

When writing to Advertisers please mention the National Nurseryman.

Fall 1918

Spring 1919

Est. 1884

400 Acres

Capital \$60,000.00

WE have our usual line of Cherry,
Sweet and Sour; Apple, Peach,
Pear, Plum, Quince; also Shrubs and
Ornamentals.

ALL UPLAND GROWN

We will be glad to send you our
wholesale price list.

MALONEY BROS. & WELLS CO.

Dansville, New York

Upland grown trees transplant best

NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER—We offer all or any part of an
accumulation of long Nursery Bands one inch in width and
sixty inches to one hundred and twenty inches in length,
at a reduction of twenty dollars a ton. This offer holds
good until stock is disposed of.

WRITE US

COVERING YOUR WANTS IN STEEL BANDS

American Steel Band Co.,

888 Progress Street,

ALLEGHENY, PA.

THE CHASE LABELS

For Nurserymen and Florists are Excelled by None

Plain, Painted, Wired with Tinned or Copper Wire and
PRINTED IN ANY MANNER that may be called for

Prices as low as First-Class Work and Unequalled Promptness in
Delivery will justify.

THE BENJAMIN CHASE CO.

P. O. Address, DERRY VILLAGE, N. H.

Western Union Telegraph, DERRY, N. H.

Subscribers to "Nurserymen's Fund for Market Development."

"BUDTIE"

What is it?

There will be no Raffia for sale this year. Govern-
ment requisitioned all of it for war purposes.

What will you do for budding this year?

USE "BUDTIE" OF COURSE

Write us for samples and prices at once.

THOMAS B. MEEHAN CO.

Introducers of "Budtie"

DRESHER,

PENNA.

Subscribers to "Nurserymen's Fund for Market Development."

N. C. NATURAL PEACH PITS

Crop of 1917 is pretty well cleaned up, only a few bushels
left. Price as long as they last is \$2 per bushel of 50
pounds, sacked, f. o. b. cars shipping station.

The 1918 crop is not yet coming in, and the reports are
that the supply is going to be very limited. Price now is
\$2.50 per bushel of 50 pounds. This is the second time we
have had to raise the price on this crop, and we are offer-
ing this price now only subject to supply and change with
out notice.

Either crop will run 7500 to 8500 seed per bushel.

J. VanLINDLEY NURSERY CO.

Pomona, N. C.

Subscribers to Market Development Fund.

Bamboo Cane Stakes

Natural 6 ft., 2000 per bale

" 9-12 ft., 400 "

" 6-9 ft., 600 "

Write for prices

McHutchison & Co., 95 Chambers St., N. Y.

Blue Spruces

Colorado and Kusters

These trees are prominent in any planting. Their color, form and habit commend them to every planter. Our trees are grafted specimens and have been frequently transplanted.



COLORADO BLUE

(Specimen Plants)

50	2 to 2½ ft.
75	2½ to 3 ft.
100	3 to 3½ ft.
100	3½ to 4 ft.
100	4 to 4½ ft.
100	4½ to 5 ft.
75	5 to 5½ ft.
50	5½ to 6 ft.
25	6 to 7 ft.
25	7 to 8 ft.

KOSTER'S BLUE

(Specimen Plants)

100	2 to 2½ ft.
100	2½ to 3 ft.
100	3 to 3½ ft.
100	3½ to 4 ft.
100	4 to 4½ ft.
100	4½ to 5 ft.
100	5 to 5½ ft.
100	5½ to 6 ft.
25	6 to 7 ft.
25	7 to 8 ft.

Right now is a good time for you to place an order for your requirements; we will ship when you say.

HARRISONS' NURSERIES,
Berlin, J. G. Harrison & Sons Maryland

Subscribers to "Nurserymen's Fund for Market Development."



THE NATIONAL NURSERYMAN



SEPTEMBER 1918

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of

Apple, Cherry, Peach
Berberis, Spiraea Van
Houtte, Other Ornamentals
Shrubs, H. P. Roses, Etc.

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.
Monroe, Mich.

Subscribers to "Nurserymen's Fund for Market Development."

MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

Shenandoah, Iowa

Our Specialty

A large and complete line of high quality Nursery Stock
for the wholesale trade.

We still have a good assortment of FRUIT TREES,
SMALL FRUITS, SHADE and ORNAMENTAL TREES,
SHRUBS, ROSES and VINES.

With our superior storage facilities we are able to
furnish a good assortment of stock for shipment until the
middle of May.

ASK FOR TRADE LIST AND BULLETINS.

We are subscribers to the NURSEYMAN'S FUND FOR
MARKET DEVELOPMENT, a co-operative national campaign
to create new business. Ask about it.

*Progressive, Superb
and Peerless
...Everbearing...
Strawberry Plants*

We can supply you fresh dug every
day. Healthy true-to-name, well root-
ed at attractive prices.

Address

The W. F. Allen Company
Salisbury, Maryland

"RIGHT now H. P. Roses, Clim-
ing Roses, Apples, Peaches,
are very scarce. Write us for
prices. Remember that we have
acres of Ornamentals, carloads of
Barberry Thunbergii and California
Privet. Pleased to hear from you."

C. R. BURR & CO.
Manchester, Conn.

Subscribers to "Nurserymen's Fund for Market Development."

The
Preferred
Stock

"There ain't nothin' never so bad as
you think wot it's goin' to be".

The
Preferred
Stock

That was the cheerful and cheering philosophy of "Glad," the street waif character, in that gripping little play, "The Dawn of a To-morrow." It is a good philosophy for life in general and particularly for the nursery business. We worry about so many things that never really happen. The railroad situation promises to be better than it was last season. Express transportation certainly **couldn't** be any worse and the chances are that the new express merger will vastly improve it. Best and most important of all the Allies seem to be slowly, but surely, getting a strangle hold on the Kaiser and we can confidently look for an ending of the war before another year is far along. Wholesale prices have advanced some but so have retail ones,—or if **yours** haven't, they **should** and **can** be. There probably will be no shipments coming over from Holland this year but—and here is where we come in—why worry about that when there are good supplies of the "J & P Preferred Stock" right here at your door. We have specialized for years in these lines.

Roses **Ampelopsis Veitchii** **Paeonias**
Large-flowering Clematis **Other Climbing Vines**
Tree-form Hydrangeas **Tree-form Lilacs** **Perennials**
Hardy Flowering Shrubs **Shade Trees**

OUR FALL TRADE-LIST is being sent to the printer just as this advertisement is written. It will be mailed early in the month. If you have not received your copy write us for it and make sure you are on our mailing list. Please use printed stationery when writing, though, or enclose business card. We send it only to "the trade."

JACKSON & PERKINS CO.,

Newark, New York

The
Preferred
Stock

Subscribers to Nurserymen's Fund for Market Development

The
Preferred
Stock

FRAMINGHAM QUALITY NURSERY STOCK

for

YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Now is the time to prepare for Fall business. Make us a visit during your vacation, inspect our stock and reserve what you require for Fall shipment.

Framingham Nurseries
FRAMINGHAM
MASS.

A Suggestion for Retailers

In the North and West, the Lilac is the most popular shrub planted. Why do we see so few of the good named varieties? Thousands are sold every year. It is because budded Lilacs are largely sold; budding is easy and growth is quick; but budded Lilacs are **not** the thing to plant.

Lilacs budded on Privet are **short-lived**; the Lilac is hardy everywhere but the Privet is not.

When budded on lilac seedlings, the stocks will **sucker** and smother the buds; amateurs cannot distinguish the stock from the plant; nurserymen can't either, and that is why they bud the colors on the white and the white on purple seedlings.

Own-root Lilacs are the only kind to plant; ours are all grown from cuttings; a Charles X is a Charles X **root and top**; as Jakey says: "De same number on de coat as on de pants."

Sell nothing but Own-root Lilacs; your customers will be satisfied; you won't get complaints about delivering "privet" and "common lilac" when the stocks outgrow the buds.

Sell Princeton Own-Root Lilacs—grown in leading varieties, single and double, and for Nurserymen Only.

Princeton Nurseries

Wholesale Growers for Nurserymen Only

at Princeton, in New Jersey

When writing to Advertisers please mention the National Nurseryman.

PAINESVILLE NURSERIES

BIDDING FOR FALL BUSINESS

FRUIT TREES

APPLES
PEARS
PLUMS, Etc.

SMALL FRUITS

CURRANTS
GOOSEBERRIES
BLACKBERRIES, Etc.

SHRUBS and VINES

BUDDLEIA
CALYCANTHUS
CYDONIA
HYDRANGEAS
PRIVET
SPIREAS
WEIGELA
AMPELOPSIS
CLIMBING HSKLS, Etc.

ORNAMENTALS

ASH
Cut-leaf Wpg. BIRCH
CATALPAS
CORNUS
ELMS
HORSE CHESTNUT
JUDAS
LINDENS
MAPLES
MULBERRIES
—Tea's Wpg. and Globosa
POPLARS
SALISBURIA
SYCAMORE
WILLOWS, Etc.

ROSES

HARDY PERENNIALS

PEONIES, PHLOX, IRIS
and complete
General Assortment

* We will have no Dutch Bulbs this Fall; otherwise,
"BUSINESS AS USUAL."

Glad to handle your Want Lists.

THE STORRS & HARRISON CO.

NURSEYRMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Blota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa

Subscribers to "Nurserymen's Fund for Market Development."

Heikes—Huntsville—Trees



Established 1872

1500 Acres

FRUIT TREES ROSES and other ORNAMENTALS

For the wholesale trade.
All of our own growing.

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

For Fall of 1918

Ornamentals, Shade Trees, Evergreens,
Perennials, Fruits, etc.

A large stock of the following:

Cherry Trees, 2 yr.
Apple Trees, 2 and 3 yr.
Peach Trees, 1 yr.
Norway Maple up to 2 inch.
Am. Elm, all sizes.

Write for special prices on car lots.

C. M. Hobbs & Sons
Bridgeport, - Indiana

Subscribers to "Nurserymen's Fund for Market Development."

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of Own Root Roses

ORNAMENTAL TREES SHRUBS
BERRIES CLEMATIS
EVERGREENS PEONIES PHLOX
and
HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY
GENEVA, N. Y.

70 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE

THE

North-Eastern Forestry Co.

CHESHIRE

...Connecticut...

A Pruning Book That Will Build Business for You



Here is a book that will help you by helping your customers.

It is a practical guide to right pruning and growing. It will tell every purchaser of your products how, when and where to prune for the most vigorous and healthy growth.

Knowing the kind of shears to get is equally as important as knowing how to use them. This book will give your customers some helpful information about shears too.

We'll Send You a Copy Free

We have a plan of co-operative selling and advertising of which "The Little Pruning Book" is an important part. It's a plan that will help you sell Nursery Stock and help us sell Pexto Pruning Shears.

You must see the book before you can appreciate the plan. It sells in book-stores for 50 cts., and believe us "It's worth sending for." Furthermore, sending for it does not obligate you in the slightest. It just gives us an opportunity to tell you about our business building plan.

Send for your free copy today.

The Peck, Stow & Wilcox Co.

2189 W. Third Street

Cleveland, Ohio



PRUNING SHEARS

We are now ready to quote lowest prices on

FRUIT, SHADE AND ORNAMENTAL TREES, SHRUBS, EVERGREENS, VINES and HERBACEOUS PLANTS

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries

Sparta, Ky.

For FUMIGATION With
HYDROCYANIC ACID GAS

"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by

The Roessler & Hasslacher Chemical Co.

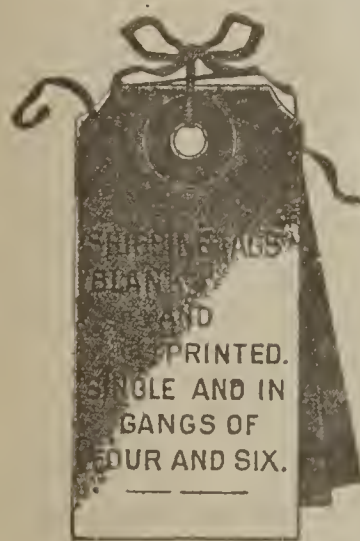
100 William St. - - New York, N. Y.

HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

Rawhide Brand of Shipping Tags and Tree Labels

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.

West Chester, Pennsylvania

For FALL 1918

We offer a Complete
List of

Shade Trees, Shrubs, Evergreens

WILL BE PLEASED TO
SUBMIT PRICES

AUDUBON Nursery, P.O. Box 731, Wilmington, N. C.

P. OUWERKERK,

No. 216 Jane St., Weehawken Heights, Hoboken, N. J.
Rhododendrons, Clematis, H. P. Roses, Hardy Azaleas,
Paeonies, Magnolias, Box Trees, Fancy Conifers, Hydran-
geas and Shrubs, our specialties at our HOLLAND NUR-
SERIES. Some of the goods on hand here during the
packing season.

TREE SEED

Large assortment of Tree, Shrub and Fruit
Seeds for ornamental and forestry purposes.
Send for catalogue. **CONYERS B. FLEU, Jr.**
Germantown, Philadelphia, Pa.

CHERRY TREES

We offer, two and three year cherry, also some nice
2 year climbing roses, on own roots. All select stock.
Write for prices in car lots.

MILTON NURSERY COMPANY,
Milton - - - - - Oregon

Seeds For Nurserymen

Apple, French, Japan and Kieffer Pear, Myrobalan Plum and
Quince Seeds. Also Tree, Shrub and Evergreen Seeds in a
large assortment. My Catalogue contains complete list with
Prices. Send for a copy.

THOMAS J. LANE
SEEDSMAN

DRESHER, - - - - - Penna., U. S. A.

WE OFFER

Grape Vines, Currants and Gooseberries
in all varieties and grades, also
Grape and Currant Cuttings and Light Grade of Vines for
Lining Out in Nursery Rows
WRITE FOR PRICES

F. E. Schifferli, - - - - - Fredonia, N. Y.



Unusual and rare stock in great varie-
ty; hardy Bamboos, Palms, Crapemyr-
tles, fruit and Economic trees and
plants, etc., etc., from all over the world.
New additions constantly being tested.
Ask for complete descriptive catalog, and
wholesale rates. 34th year.

REASONER BROS.,
ONCO - - - - - FLORIDA.

PRINTING

Catalogues
Stationery
Business Forms



The Robinson
Publishing Co.
Hatboro, Pa.

Specialists in Nursery Printing
Ask for Prices. We are the printers of this Magazine



Field-grown own-root

Roses Shipments Jan. 1st
to March 15th

Howard Rose Co., Hemet, Cal

Peonies

Profitable cut-flower and best general plant-
ing varieties. Very early—early—midseason
—late. Any quantity. Own growing. Im-
mediate shipment. Prices reasonable.

HARMEL PEONY COMPANY,
Berlin - - - - - Maryland

THE WESTMINSTER NURSERY

J. E. Stoner, Prop.

WESTMINSTER - - - - - **MARYLAND**

Offers for Fall, 1918:

10,000 Monacacy Apple, 2 yr., Buds.
250,000 Cal. Privets, 2 yr. and 3 yr.
500,000 Asparagus Asst., 2 and 3 yr.
Barberry Thun., 3 yr., extra fine.
Lombardy Poplars, 8 to 16 feet.
Oriental Planes, 8 to 16 feet.
Tulip Poplars, 6 to 12 feet.
Horse Chestnuts, 8 to 12 feet.
Catalpa Speciosa, 8 to 12 feet.
Can supply the above in CAR lots.

We also offer in large lots, Rhubarb, Cumb. Raspberry,
Ruby, Miller, and St. Riggs Raspberry Altheas, 3 to 5 feet,
Deutzias, and Spireas Asst., Hydrangeas P. G. Etc. Will
make low prices for early orders.

FAIRFIELD NURSERIES

FRUIT AND SEED FARMS

OFFER for Fall 1918

GRAPE VINES—One and two years old. Varieties
largely Moore's Early, Concord and Niagara.

Also Scarlet or Crimson Clover Seed and Cow Peas.
Free from weed seeds, all recleaned and guaranteed first
class.

Correspondence solicited. Price list upon request.

CHAS. M. PETERS

P. O. Address, Salisbury, Wicomico County, Md., R. F. D. 3

Long Distance Phone and Telegraph, Salisbury, Md.

EVERBEARING STRAWBERRY PLANTS

If you need Everbearing strawberry plants to fill spring
orders or if you wish to increase your planting in nurseries,
we can supply you with genuine PROGRESSIVE Everbearing
plants, guaranteed to be TRUE TO NAME and handled so as
to reach you in best of growing condition. Write for prices.

We have been growing and breeding the Everbearing straw-
berries for the past eight years and have many new varieties
growing in our experimental grounds that are not yet for sale.
We invite a personal visit to our grounds during fruiting sea-
son, preferably during August or September. The latch string
is always out.

THE GARDNER NURSERY CO., Drawer 103, Osage, Iowa.

GUARANTY NURSERY COMPANY

Granite Building,

ROCHESTER, N. Y.

I am in the market for a general line of all classes of Nursery Stock for shipment this Fall and next Spring. Send me list of what you have to offer with best prices for cash on usual terms. Quality is more important with my company than cheapness.

WALTER F. WEBB, Proprietor.

Wanted Peonies

Three to five eyes, mixed varieties, in large quantities.

Write letter "H," care "The Nurseryman," quoting best possible CASH prices and state quantities and time of delivery.

BUNTING'S NURSERIES

Offer for Fall 1918 and Spring 1919

Asparagus roots 1 and 2 yr.; California Privet 1 and 2 yr.

Barberry Thunbergii 2 and 3 yr. heavy on above.

We also have a fair stock of Apple trees 2 yr., Peach trees 1 yr., Concord Grapevines 2 and 3 yr., Spirea Vanhoutte, Hydrangea P. G., Duetzias, Weigelas and Altheas assorted; Philadelphus Grandiflora; Scotch Broom, Buddleia, Wisteria, white and blue; Dorothy Perkins roses 2 yr., Norway and Silver Maples, Catalpa Speciosa; Evergreens, etc.

Write us covering your wants in any of the above stock, prices as low as first class stock and prompt service will justify.

G. E. BUNTING & SONS

SELBYVILLE,

DELAWARE.

Subscribers to "Nurserymen's Fund for Market Development"

**HARDWOOD CUTTINGS
PRIVET ALL KINDS**

We make a specialty of the above and can give you extra good service. Write us.

OAKLAWN NURSERY,

Huntsville

Ala.

:: Peony Profits ::

Can be had only if you have the Peonies. The profits are there if you go after them. The demand for both plants and flowers is increasing. Prepare to get your share. Order now and be assured of your supply.

Wild Bros. Nursery Co.

Sarcoxie, - Mo.

TULIPS

PEONIES

IRISES

NARCISSI

Peonies.—Standard varieties. Also a quantity of seedling singles and doubles, fine for extensive planting.

Tulips.—Darwin, Cottage, Parrot, in standard varieties and mixture. A large quantity of small planting sizes of Darwin, Cottage, and Parrot mixtures, Wedding Veil, White Queen, Kate Greenaway, Mrs. Potter Palmer, Clara Butt, Ellen Willmott, Bouton d'Or, Caledonia. If you wish any of these, write at once.

Irises.—Siberian in blue, white, and purple. German-Florentina, Flavescens, Kochii, Mad. Chereau, Gazelle and miscellaneous.

Narcissi.—Write for special offerings.

ORONOGO FLOWER GARDENS,

CARTHAGE,

MO.

You can save Time and Money

If you use our neatly packed

SHEET NURSERY BURLAP

Put up in bales

In various size sheets ranging in sizes from 24x24 to 40x40 in.

Write for particulars

Sarachan & Rosenthal

64-66 Hanover Street

Rochester, - - New York

Vincennes Nurseries, W. C. REED, Prop.

VINCENNES, - - INDIANA

We are pleased to offer for Fall or Spring:

CHERRY, 2 year X X 1 inch up, also $\frac{3}{4}$, $\frac{5}{8}$ and lighter grades.

CHERRY, One year $1\frac{1}{16}$ up, $\frac{5}{8}$ & $\frac{1}{2}$ to $\frac{5}{8}$

Our Blocks of Cherry are largest to be found in U. S.

We bud annually 500,000 Cherry, they are making splendid growth.

Peach, One Year, all grades leading Varieties.

Plum, Japan and European, One and 2 year.

APPLE, 2 year, a few cars for late fall shipment.

Grafted Hardy Northern Pecans.

Car Lots a specialty, also fair assortment of Ornamentals.

Subscribers to "Nurserymen's Fund for Market Development."



PECAN TREES

**QUALITY
SERVICE**

W. L. STEWART

VALDOSTA,

GA.

Member Southern Nursery Association

RAIN!

RAIN!

RAIN!

We have been fortunate in getting plenty of good soaking rains all summer, and our trees have made a wonderful, strong, thrifty growth.

We offer for late fall and early spring shipment a large stock of

APPLES, 3 year, grown from whole root 7 to 12 in/m French Imported Apple Seedlings. A very fine, thrifty, well rooted stock of trees.

11-16 & up	5-8 to 11-16	11-16 & up	5-8 to 11-16
Alexander	300 100	N. W. Greening	500 300
Arkansas Black	150 200	Northern Spy	2500 2000
Bellflower	500 150	Ox Noble	250 100
Baldwin	8000 3000	Ontario	150 200
Ben Davis	500 1000	Pewaukee	600 200
Chenango	800 1000	Paradise Winter	
Duchess	5000 2000	Sweet	100
Early Harvest	250 300	Red Astrachan	500 700
Fallawater	200	R. I. Greening	1500 750
Gideon	5000 3000	Rox. Russett	200
Golden Russett	300 150	Rome Beauty	2000 1000
Grimes Golden	1500 2000	Rambo	1500 600
Gravenstein	100 100	Snow	750 350
Gano	1000 600	Stayman's Winesap	1500
Jonathan	2500 2500	Sweet Bough	350 200
King (Tompkins)	1000 400	Stark	750 300
Longfield	400 100	Talman Sweet	500 500
M. B. Twig	500 400	Wealthy	2500 2500
Munson Sweet	300 100	Wagner	2500 3500
Mann	250 250	Wolf River	1000 400
Maiden Blush	250 400	Yellow Transparent	2500 2000

We offer a fine stock of 1/2 to 5/8 inch grade in all varieties above mentioned.

STANDARD PEARS, 3 year, extra fine.	Special low prices
on Kieffer.	1 in. 5-8 in. 1 in. 5-8 in.
Kieffer	14000 300 Illinois Lincoln 40 15
Clairgeau	2500 800 L. B. Jersey 200 25
Clapps	1100 500 Early Harvest 225
Wilder	900 150 Vermont Beauty 160 25
Bordeau	300 150 Koonce 40 40
Lawrence	450 40

PEACHES 9-16 and up, 7-16 to 9-16 and 5-16 to 7-16 grades. Our peaches will grade 75 per cent to No. 1, owing to the splendid growth they have made all summer, on account of the abundance of rain-fall. If desired we can select out a heavy grade, stronger than No. 1.

List of varieties

700 Alexander	10000 Anderson
250 Bronson	4000 Beers Smock
7000 Banner	4000 Crawford Early
5000 Crawford Late	300 Chairs Choice
3000 Carman	3500 Champion
700 Crosby	500 Early Rivers
200 Early Michigan	500 Early Barnard
4000 Engles Mammoth	40000 Elberta
4000 Fitzgerald	300 Foster
400 Globe	2500 Golden Drop
750 Greensboro	500 Hills Chili
2500 Heath Cling	5000 J. H. Hale
600 Lemon Cling	1000 Mountain Rose
1000 Mayflower	25000 New Prolific
1000 Niagara	1000 O. M. Free
1000 O. M. Cling	500 Oceana
1000 Red Hills Chili	1000 Stump
5000 Salway	750 Triumph
4000 Wonderful	350 Weeds Barnard
2500 Yellow St. John	

SHRUBS, 500,000 shrubs extra strong and well developed stock, especially adapted for landscape planting. Shade and ornamental trees in all varieties.

WANTED IN EXCHANGE. Apple, pear, plum and cherry seedlings, also small fruits.

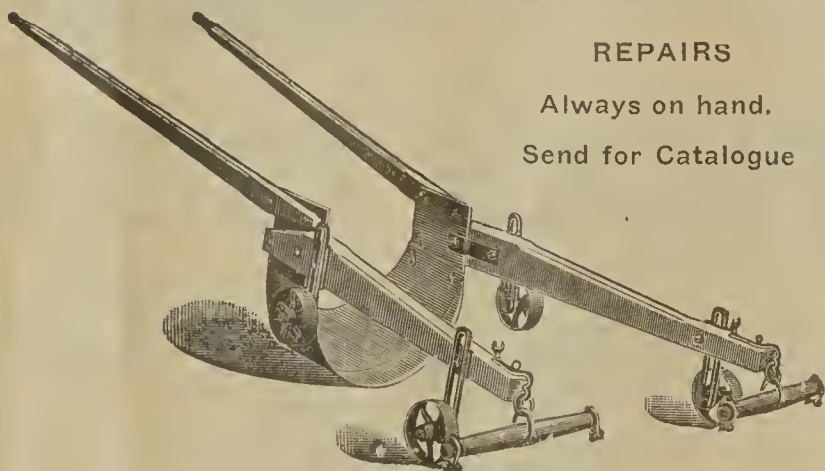
Attractive prices will be given in carload lots as long as supply of stock holds out.

THE GREENING NURSERY CO., Monroe, Mich.

1857

1918

BRAGG'S COMMON SENSE TREE DIGGER



REPAIRS

Always on hand.

Send for Catalogue

Digger gets All the Roots at the rate of Twenty to Forty Thousand trees per day, and only needs same power as plow.

L. G. BRAGG & CO.

KALAMAZOO, MICH.

Hill's Evergreens

You can work up a good profitable trade in Evergreens if you have the right kind of stock. Our main specialty for over half a century has been the propagation of young Evergreen stock for the wholesale trade in immense quantities at low prices.

We have all the leading varieties in small sizes, for all purposes, suitable for lining out to grow on for your trade.

Nurserymen who have heretofore depended on Europe for their young Evergreen plants can now be assured of a good reliable source of supply right here in America, and we solicit the opportunity of quoting on your requirements.

"Made in U. S. A." and "American Stock for American Planters" should, from now on, more than ever, be the slogan of American Nurserymen for it means "money saved in the long run" to start with nice, strong, sturdy, vigorous American-grown stock which has been produced right here in America.



YOU want to keep posted on Evergreens;

WE want to become better acquainted with you;

Let's get together.

The D. HILL Nursery Co., Inc.

Evergreen Specialists

LARGEST GROWERS IN AMERICA

Box 401

Dundee, Ill.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSEYSTOCK

The National Nurseryman Publishing Co., Incorporated

Vol. XXVI.

HATBORO, PENNA. SEPTEMBER, 1918

No. 6

VINES



Wistaria sinensis grown in bush or tree form.

VINES are the gardener artist's standby. They are depended upon to cover a multitude of sins. Whether it be old tree stumps, too costly to move, faults in architecture, old buildings, unsightly

fences, a vine is the first suggestion, and if the right one is selected and properly planted, it usually accomplishes its purpose.

The place is indeed small where at least one vine can-

not be used to much enhance its beauty.

Many people object to vines for various reasons, but the reasons generally given are invariably based upon the misuse of them, or ignorance.

One occasionally hears the statement "that vines make the walls damp." Nothing is farther from the truth, as they actually make them dry as anyone may prove to his own satisfaction if he will examine a vine-covered wall after a driving rain. The leaves are so arranged that they throw the water away from the wall.

Another reason for the objection to them is "They damage the buildings." Very true, they do if the strong growing kinds are neglected and allowed to grow wild, twisting around the rain spouts and forcing their way under the shingles and in other crevices.

But nothing in the garden should be so neglected, and everything considered, the majority of vines give more results to the dollar expended than any other kind of plant.

The subject of our illustration, *Wistaria sinensis*, is perhaps one of the most strikingly beautiful of all vines. The picture shows it growing in tree or shrub form. Planted in the open where there is nothing for it to climb upon, it makes a very handsome object when in flower, but woe betide the tree within its reach, because it will change its habit from a shrub-like plant and quickly reach the top, then it is only a matter of time until the tree is merely a dead support for the *Wistaria*.

The vigorous habit of the *Wistaria* should be kept in mind when planted near buildings. It is best adapted to pergolas and massive structures, where its bunchy habit and strong growth will show off to the best advantage.

Wistaria sinensis is perhaps the best and most popular. It is a common complaint that certain plants do not flower, for which numerous explanations may be given. The main one will usually be found due to the plant growing too vigorously.

Planted in rich soil it seems to devote its whole energy to growing, not making flowering wood for a number of years. This is especially so when it does not get full sunshine.

A suggested remedy is to check the growth by root pruning.

Nurserymen have little trouble to make them flower when planted in nursery rows, when transplanting checks the growth and they are not allowed to climb.

Some claim that only grafted plants should be sold. There is little doubt that the check to the growth due to grafting will insure early flowering.

In the northern states they are shyer in blooming than in the southern ones, which indicates that this is partially due to lack of sunshine and heat.

To many the planting of a vine near a house is a small matter, but the writer knows of at least one instance where a large, costly house, the residence of Mrs. Henry B. Gilpin, Boyce, Virginia, was placed against the vine.

A fine old *Wistaria* decided the location of the house, and anyone who has had the pleasure of seeing this *Wistaria* gracing the huge marble columns and facade of the house, have to admit the owner's appreciation of true values.

A VISIT TO PRINCETON NURSERIES

If any good nurseryman is suffering from war depression, a good remedy would be for him to pay a visit to Princeton Nurseries and spend the day with John Watson.

If he does not come away with renewed optimism and faith in the future, then his case is hopeless, and the sooner he gets into some other business the better. Not that Mr. Watson is not fully alive to all the difficulties and obstructions that the nurseryman will be called on to face, for there is no man in the trade that has a wider knowledge and keener business acumen, but he has that happy faculty of seeing things as they really are when stripped of all those things that are so apt to confuse the vision of so many of us.

He has faith in the future of a legitimate business and that the common sense of the majority of nurserymen will eventually lift the trade out of the slough of despond and put it upon a plane where it should be, and faith in the future of the country (especially under a democratic president).

Arriving at Princeton Junction at the present time, the nurseryman is not favorably impressed by the evident failure of a splendid conception in nursery advertising, namely the show grounds of the Elliott Nursery Company, which have evidently been abandoned, let us hope only temporarily.

Mr. Watson with his car quickly diverted our thoughts to a more inspiring object in the distance, the beautiful tower of the Princeton University, and the Carnegie Lake.

Why are the sand dunes and mosquitoes of New Jersey better known than the magnificent scenery of this State? It would be hard to find a more pleasing topography than the locality of Princeton. Maybe the advertising man has not been on the pay roll.

Arriving at the office, the first impression is newness, the next and most lasting is, here is a concern which believes in itself and in its profession, and this impression holds good all over the 265 acres, of which about 200 are planted in nursery stock.

Perhaps some credit must be given to the fact that Princeton Nurseries are new and have not had time to accumulate stocks that qualify for the brush pile. This however, does not altogether explain the absence of weeds, the uniformity of the plants in the row, the business, the acreage planted the past spring, when many other nurseries have run to weeds, and the class of stock composing the plantings.

Short cuts and cheap methods of raising quantity rather than quality are evidently not popular with Mr. Frank Waterhouse, the propagator in charge, who likes to look along a row of plants in the nursery very much in the same way the drill sergeant does his men, and it was quite refreshing to have him call attention to something and apologize for its not being quite up to what it ought to be.

Growing named Lilaes on Privet may be a quick method of raising saleable plants, but no plantsman could get quite the same thrill of satisfaction as from the Princeton Nurseries block of own root stock. The height may not be there, but what the plants lack in height

they more than made up in sturdiness, bushiness and quality.

The propagating frames are an efficient looking lot, and are well filled with a promising looking lot of cuttings. The shade question is solved by the erection of lattice work, about seven feet high, resting on one and one-quarter inch pipe uprights bedded in concrete, covering the whole series of frames.

The method of handling the cuttings from the time they are put in the sand until they are in the nursery rows, explains the uniformity and bushiness in the nursery rows. When planted out from small pots or from the frames where they have been bedded, they are all cut to the ground, insuring even, bushy plants from the ground up.

Another wrinkle I noticed when a large planting of things like *Berberis Thunbergi* was made, that would entail a lot of hand labor and extra care in cultivation while they were small, after they were planted in the nursery rows, the ground was sown with barley or one of the grains. This acted as a nurse plant, kept the ground free from weeds, and when the frost kills the immature grain in the fall it acts as a mulch for the young plants during their first winter.

While the Princeton Nurseries are catering to the wants of the trade in the common or popular well known plants, they have evidently an eye on the future demand for good things that are not so easily grown.

Promising lots of such plants are *Cotoneaster horizontalis*, *Euonymus vegetus*, *Lonicera pileata*, the dwarf prostrate Junipers, *Oxydendron arboreum*, *Berberis illicifolia*, *Taxus canadensis*, varieties of Box, and such like.

Among the trees was noticed a pyramidal form of the cut-leaf Silver Maple, but on a new nursery, one hardly expects to find many new or rare trees and plants, rather stock for which the management thinks there will be a market. The items that stand out in my recollection were an exceptionally fine block of peach buds and one year trees.

Viburnums, including Seiboldi, of which I did not think there were so many on the market, *Catalpa Bungei*, with stems as straight as one could wish, 2 and 3 year Lombardy Poplars, as pretty as a picture, promising blocks of young Oaks, and a block of Oriental Planes that would satisfy the most exacting buyer.

Yes, it was a profitable and enjoyable day, perhaps not from a pecuniary point of view, but rather in renewed hope of the future.

"HAPPY" JIM

James W. Fraser of the Fraser Nursery Co., Huntsville, Alabama, is one of the happiest men in all the United States. He has been recently presented with a little girl baby.

"Jim" always was fond of the ladies and now he has one of his very own. Talk about "Peach Buds" and all that kind of thing, there is no stock that can come within a hundred miles of what is now growing down in Alabama. If you don't believe it, ask Jim.

ONCE UPON A TIME

Once upon a time there was a very large and wealthy country. The people on the whole were happy and contented because they did very much as they pleased.

There was, however, one section of them, that somehow did not seem to fit in with the general prosperity and progress of the country. They were under exactly the same laws and had the same privileges as the others, and what was most surprising their business or profession had to do with the very foundation or well being of the country. Next to agriculture it was the most important to the health and happiness of the inhabitants. This peculiar group of men used to devote their whole lives to the propagation and growing of fruit-trees and bushes, but they seldom kept the trees and bushes long enough to gather the fruit from them themselves, preferring to grow them two or three years and then sell them for a few cents each.

They also propagated and grew beautiful ornamental trees and plants that had been brought from different parts of the world. These were planted along the highways, around the dwellings and in the parks and gardens, in fact the beauty of the country surrounding cities, towns, villages and dwellings depended on these nurserymen, and the peculiar thing about it, these ornamental plants, which sometimes took from five to ten years to raise, so that a man after he had learnt his profession, and become skilled, could only raise four or five crops in his life time would be sold for one or two dollars.

Other manufacturing industries would get several cents for an article that only took a few seconds to make and rapidly accumulated fortunes and lived very prosperously and were enabled to pay their workmen good wages.

The professional men such as physicians, lawyers, would charge several dollars for a few moments of their time.

These nurserymen were a strange lot when you met them on the street you could not distinguish them from other prosperous business men, in fact some had wealth which they acquired in other lines of business and finance, but when it came to getting just returns for their skill, labor and investment in the nursery business they could never agree on what it should be and so agreed to disagree and prevent any raise of price.

Occasionally through an accident there would be a shortage of some particular kind of fruit or ornamental tree and the price would go up to a point where it would repay the nurseryman for his labor and investment, because the public were always willing to pay what was right, but immediately all the nurserymen would grow all they possibly could so as to bring the prices down, in fact there would be so many they would have to burn them up.

For many years the philosophers tried to show them the error of their ways, because they were very unhappy. They did not want their noble calling to be so disorganized and discredited, they realized that under such conditions no progress could be made in the improvement of varieties, methods of cultivation and production and while wonderful progress was being made in all the other arts, the noble one of horticulture was deteriorat-

ing, through lack of the application of the same principles that had been applied so successfully to other lines.

The wise men advised them to take to heart and act upon it the teaching of the great Ruskin, who said: "It may be proved with much certainty, that God intends no man to live in this world without working; but it seems no less evident that He intends every man to be happy in his work. It was written: 'In the sweat of thy brow,' but it was never written: 'In the breaking of thy heart.'"

It has never been recorded if the nurserymen put their business on the same plane as other industries.

ADVICE TO SALESMEN

If it were possible to turn a well-trained lot of nursery salesmen into the country, the demand for nursery stock would be trebled or quadrupled in a year, not merely order-takers with a picture book, but men who know plants and can create a desire for them.

The ten commandments of salesmanship by Dr. Frank Crane were recently published in the press, and if adapted especially to nursery salesmanship, would read somewhat as follows:

1. Be agreeable. Other things being equal, I buy from the man that tries to please me. Exert yourself to make a pleasing impression on me. I appreciate it. Hence, dress well. Untidy clothes mean that you do not care what I think of your appearance. Do not dress too well. That gives you an air of showing off. Dress just right. If you do not know how, find out. Cultivate a pleasing voice. Learn to converse entertainingly. Cut out all mannerisms. Give me the impression of a gentleman, honest, square, anxious to please and good-natured.

2. Know your goods. Do not let there be any question I can ask you relative to a plant that you cannot give me some information about it, if possible its common and botanical name, where it comes from, the soil or position which suits it best. In fact, the nursery salesman should be a walking encyclopaedia of plants.

3. Do not argue. Make your suggestions, but always give way to the opinion of your customer. Leading, do not oppose. Do not show him where he is wrong, but show the customer wherein you are right. Suggest and do not antagonize. Argument as a rule results in irritation and not conviction.

4. Make things plain. Don't use any words I don't understand. You can explain the most complicated matter to a washwoman if you know your subject perfectly and practice using simple language. Don't air your technical knowledge of plant names and try to impress me. I want to be flattered, not awed.

5. Tell the truth. Don't lie, or exaggerate, or mislead, or conceal. Let me feel that you are sincere, and mean every word you say, and that every statement you make is of par value. If you represent goods that need lying about, directly or indirectly, quit. There are plenty of articles that are straight and all right. Sell them.

6. Be dependable. Even in small things create the impression that whatever you promise is as much to be depended upon as your signed note. If you make an appointment at 3 p. m. Tuesday, be there at 2.45 or tele-

graph. If I order goods of a certain grade, let them be found to be exactly of that grade when I receive them.

7. Remember names and faces. If you have not a natural gift for this, acquire it. Get a little book and set down every day the names of those you have met, with their characteristics. Practice this until you become expert. No man likes to be forgotten or to have you ask his name.

8. Don't be egotistic. Eliminate the pronoun I as much as possible from your vocabulary. Talk about me not yourself. Don't tickle yourself, tickle me. I'm the one you want to win.

9. Think success. Success begins in the mind. Why think fifty cents, when it is just as easy to think fifty dollars? Tell success stories, not incidents of failure and hard luck. Radiate prosperity. Feel prosperous. It's catching. Keep your chin up.

10. Be human. The reason you are hired to sell goods is that you are a human being. Otherwise your employer would have sent a catalogue. So be a human being, likable, engaging, full of human electricity. For I patronize as a rule the salesman I like.

Selling goods is the greatest business in the world. It takes all there is in a man. You need to know psychology, you need tact, intelligence, self-control, courage, persistence and inexhaustible good humor. It is not a job for a second rater. You simply have to make good or go under.

FOUR GENERATIONS

In these days the wonderful and commonplace are very much mixed. On a hot day recently the writer called to see an old friend, James Krewson, at Cheltenham, Pa.

Being in the seventies I fully expected to find him near the nursery office sitting in the shade of a tree. His son—Charles Krewson, who has charge of the office, advised me he was out on the ground looking after some draining. Sure enough he was, not only looking after it, but right in the ditch with the other men apparently enjoying it. How are you Mr. Krewson, isn't this kind of work a little hard on a man of your age on a day like this? Oh no, I feel first class and like it, but my father is not so well during this hot weather. And how old is your father? 94 years. Well you have much to be proud of, four generations on earth at one time. And up above a flying machine was looping the loop doing the nose dive and the leaf drop.

The past generation had no such thrills while working out in the nursery.

GOOD NEWS FOR NURSERYMEN

The United States Railroad Administration has given assurances that the orders of last March placing nursery stock on the list of commodities exempted from embargoes will be continued for the Autumn and Spring shipments of nursery stock.

Walter F. Webb of the Guaranty Nursery Company, Granite Building, Rochester, N. Y., reports business very fine, in fact two or three times ahead of last year.

THE AMERICAN RED CROSS
DEPARTMENT OF MILITARY RELIEF
BUREAU OF CAMP SERVICE

Associate Field Director, James O. Tryon,
Camp, U. S. Army Debarkation Hospital No. 2,
Fox Hills, Staten Island, N. Y.

Garfield Williamson,
52 Broadway, New York.

Dear Sir:—

For the purpose of beautifying the grounds around the convalescent house and hospital wards, and making the surroundings more attractive for the wounded men from the front who are to be patients here, we would welcome donations of plants, trees, shrubbery, etc., of any description.

If you have anything of the sort which you are willing to contribute for this purpose, it would be of most valuable service to our wounded, and we would be glad to send for the articles if you will advise us where and when they may be had.

Yours very truly,

(Signed) JAMES O. TRYON,

Associate Field Director.

August 5, 1918.

James O. Tryon, Esq.,

Associate Field Director,

U. S. Army Debarkation Hospital No. 2,

Fox Hills, Staten Island, N. Y.

Dear Sir:—

I am in receipt of your circular letter soliciting contributions of nursery stock for the beautification of Hospital Grounds on Fox Hills.

As I have contributed more than I could afford to the Red Cross, Y. M. C. A., K. of C., and other organizations, I feel that I am at liberty to advise you that I consider this circular ill advised if well intentioned, and can state my views without being accused of Pro-Germanism, Unpatriotism, and selfishness.

The nursery business has been very hard hit by the war. I seriously question if any nursery in the United States has really made money since the war started. I am quite sure that a great majority of them have lost money.

The Red Cross, I am sure would not dream of asking the Lumber Companies to supply the lumber to build the Hospitals, or Medical Supply Houses to furnish the medical supplies. Why then should our hard hit business be called upon to give product of our industry?

Another reason why I object to contributing any material is because I believe that by following this plan you will never be able to beautify the grounds surrounding these buildings. Promiscuous planting of a hodge-podge selection of nursery stock could not possibly be attractive. You might just as well try to attractively and adequately clothe an army from a collection of wearing apparel made by the Red Cross or the Salvation Army. I believe the only way you can get effective results is by

following some design made by a competent landscape architect.

Yours very truly,

GARFIELD WILLIAMSON.

OPEN LETTER TO NURSERYMEN

To the Members of American Association
of Nurserymen:

Your Executive Committee begs to submit this open letter, hoping to encourage the fullest confidence and co-operation on the part of every member. These are troublous times through which the nursery business is endeavoring to live and serve, and your officers are desirous of rendering every possible assistance. However much this may be the desire of those you have elected to supervise the affairs of your association, they can accomplish little without your co-operation and fullest confidence.

MEMBERSHIP

The membership must be held intact, and every present member should not only count it a great privilege to retain his membership under the new order of things, but should endeavor to bring into the Association every worthy nurseryman in America. Will not each of you co-operate with the new Secretary in an endeavor to build the membership of our Association? The new schedule of membership fees and dues, as shown in amendment to constitution, was adopted by practically an unanimous vote of the Chicago convention. The new schedule of membership fees and dues will provide funds necessary for the ongoing of the work, and is a fair and equitable adjustment of the question of taxation necessary in every organization. The new schedule becomes operative June, 1919.

COUNSEL SMITH

The Committee has retained Counsel Curtis Nye Smith for the ensuing year and congratulates the membership on having one of the ablest attorneys in the country to represent its interests. The duties of Mr. Smith will embrace confidential service to the membership, maintenance of the Credit & Collection Bureau on same basis as formerly, and looking after matters of transportation which he so ably handled during the past season. We urge every member to avail himself of Mr. Smith's services. Send him your past due accounts; consult him when in need of dependable advice, even of a private nature, which relates to your own business. We are of the opinion that if all collections were placed in Mr. Smith's hands immediately they become delinquent, this department would become almost if not quite self-sustaining. Mr. Smith cannot serve you unless you call on him. He will serve you without cost in any capacity where an attorney can serve.

SECRETARY SIZEMORE

The Committee is glad to be able to report that Mr. Chas. Sizemore has been retained as general Secretary for the Association and will give his undivided attention to Association affairs. His office for the present year will be maintained at Louisiana, Mo. In addition to the general duties of Secretary, Mr. Sizemore will audit the

freight and express bills of the members, charging for this service 25% of the amount collected from the transportation companies as overcharges, which goes into the treasury of the Association. We confidently believe that if the membership will send Mr. Sizemore their old freight and express bills he will collect overcharges enough to return to such member every dollar his membership costs, and more. Furthermore, the amount charged for this service, 25%, is almost 10% less than that charged by auditing concerns, and it is believed will, if used by the entire membership, largely pay the Secretary's salary.

We want to again urge every member to use to the limit both the office of Counsel Smith and Secretary Sizemore. These are your officers and they will go the limit to serve you. USE THEM.

No man knows what a day may bring forth in new and complex problems. Your Committee earnestly desires to assist every member to the utmost of its ability. The nursery business should be placed upon a more stable basis. With your co-operation we can be of service, and this is our aim.

J. R. MAYHEW, *President*.

J. EDWARD MOON, *Vice-President*.

E. S. WELCH,

C. C. MAYHEW,

E. W. CHATTIN,

T. B. WEST,

C. R. BURR, *Executive Committee*.

URGE YOUR CUSTOMERS TO PLANT IN THE FALL

Every nurseryman knows that from early September until the ground freezes is a good time to plant almost all of the hardy trees, shrubs and evergreens and most fruit trees and he should use every effort to pass this information along to the public, as the average layman only thinks of planting in the spring.

Sometimes in early Fall the weather is extremely dry and hot, and under such conditions it is not perhaps wise to plant, but if the ground and weather conditions are right, the plants will practically gain a season's growth by being planted at that time, in comparison with leaving the planting until spring.

Spring invariably comes with a rush. One week the ground is frozen. Then there comes a hot spell and plants are in bud, making this season extremely short.

By September most plants have completed their growth and are in condition to move. In the case of deciduous shrubs and trees it is always well to strip the leaves off them or they will wilt and look bad, but this is a small matter compared to the advantage of having the planting done six months ahead.

In early Fall the ground is still warm and newly set out plants immediately begin to make feeding fibers, and so become well established before the severe weather of winter and are in a position to take full advantage of the spring growing season.

When larger trees are moved in the Fall it is always well to take a little extra precaution to stay them well by guy wires, fastened to stakes, as the freezing and

thawing of winter, combined with the wind are apt to loosen them in the ground, which is almost sure to be fatal.

A good plan is to bank soil around them two or three feet. This keeps the frost away from the roots and helps to steady them. The ground can be moved away in the spring.

The writer has seen some very successful planting of Oaks handled in this manner, and in the case of shrubs a good mulching is to be recommended to prevent drying out in dry frosty weather.

The man right in the locality or on the ground, of course is the best judge, as local conditions always have a bearing on deciding which is the best season to plant.

The main thing to keep in mind is that it is possible to very much extend the season in which it is commonly done and it is up to the nurseryman to educate and encourage the public not to defer until spring what can be done in the fall.

PERILOUS WAR FINANCE

There is a deeper difficulty involved in a tax on so-called luxuries than mere enhancement of cost to consumers.

This is a nation of 100,000,000 people, of whom about 2½ per cent are now diverted from industry to war.

The remaining 97½ per cent must live, move and have their being, besides providing for the requirements of the 2½ per cent in the shape of food, clothing and munitions.

Upon the prosperity and well-being of the 97½ per cent depend the Nation's strength to fight and power to endure.

The off-hand policy of the Treasury Department and of bureau heads generally is to ignore the needs of the 97½ per cent and to concentrate all energies, physical and financial, behind the 2½ per cent.

No one for a moment questions the necessity for a most complete and thorough support of the soldiers and sailors.

But there now arises a sharp difference of opinion as to how that support can best be maintained.

The collapse of the Coal Administration last winter was a blow to industry from which the country still staggers.

Yet in the face of that experience and its consequence it is proposed to adopt methods which will curtail many industries and stop others, and totally to disregard the greatest factor in the situation—which is:

The need of providing for redistribution of the enormous sums poured into the Nation's war purse.

A limited number of concerns make munitions, build ships and furnish war supplies for the 2½ per cent of the population directly engaged in fighting.

The rest of the country must furnish the bulk of the funds and maintain itself at the same time on a basis that shall grow stronger rather than weaker.

If the proposed plan of taxation prevails, how will it be possible to redistribute the money thus concentrated in such wise that each citizen may be properly provided with the means of making a living which will enable him to go on contributing his quota to national confidence and prosperity?

It needs but little thought to realize that the sale of so-called luxuries constitutes one of the best means of insuring a normal, healthy flow of money through all parts of the industrial organism.

The necessities of life are relatively few. Luxuries count heavily on the profit-making side of industry. A bare living for the individual contributes little to the common prosperity.

The Government pays colossal wages. It has lifted the cost of labor in all lines to the limit of endurance.

Employers and employees in a few industries engaged in the making of munitions profit enormously.

But other Americans—millions and tens of millions of them—must suffer to the verge of ruin unless somewhere the vein is tapped.

If Federal War Finance continues to form its programme on the easy theory that its sole task is to get money out of the country, without any provision for putting money back and assuring its steady, stimulating flow through accustomed channels, the Nation will presently find itself stricken with industrial paralysis—at the time when, of all times in its history, it has need of its full health and strength.—New York Evening World.

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by

THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

Advertising rates will be sent upon application. Advertisements
should reach this office by the 20th of the month previous to the date
of issue.

Payment in advance required for foreign advertisements. Drafts
on New York or postal orders, instead of checks, are requested by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., September 1918

Subscribers to "Nurserymen's Fund for Market Development"

RAISE THE STANDARD Ask any nurseryman his opinion of the condition of the nursery trade, and with few exceptions the same answer will be given "pretty rotten," or words that will convey that meaning. In analyzing the cause one cannot help but come to the conclusion it is not due to the war, transportation troubles, labor or any of those causes to which the condition is so often attributed. It is more deep-seated, and is really because there is something lacking—the inability of the trade to think and act as a trade. The trade is merely an aggregation of individuals, who try to keep their own concerns afloat without regard to each other.

In the last six months we have seen two large nurseries of several generations old, and of almost international reputation in the horticultural world, go out of business, we might say die, because it was not worth while to keep going and judging from the tone of the horticultural papers from Australia, New Zealand, Great Britain, very similar conditions maintain in those countries. Perhaps the profession is everyman's job and the rich man's hobby, and is not capable of being commercialized and standardized to the same degree as other trades.

Perish the thought. It merely needs the raising of the standard. At one time the barber acted as physician, but now it needs a good education and a special college course before he is even allowed to begin to cater to the ills of humanity.

There was a time when rushes strewn on the floor sufficed for a carpet. Now, even the poor would hardly

be satisfied unless they were woven, and the rich require the most beautiful fabric that can be made.

These may not be true parallels, but they convey the right thought. Until the standards can be raised, when the public will be educated to demand the best, and only those who are masters of their profession can produce stock up to the standard required, raisers of cord wood and faggots will always be on hand in sufficient quantity to make the production unprofitable.

At present the raiser of a choice, high quality plant complains that no one appreciates it. He can get no more for a two inch tree that has been transplanted three times, than the fence corner artist, who offers a two inch seedling.

Until the standards of growing and handling are raised and priced we cannot expect much change.

On another page we publish a letter asking for contributions of nursery stock for the Red Cross, and reply.

In these times every true American practices the injunction to give until it hurts, and then some. We at home cannot give as much as those brave boys who are giving their all.

This phase of the subject does not enter into the protest against giving nursery stock. The protest is against the layman's idea that nursery stock does not represent the cash of a weekly pay-roll, maybe borrowed from the banks, and upon which interest is paid for two or three years.

It is a safe and really modest statement to make that nurserymen as a class are as generous and as patriotic as any other class of men in the country. We do not think anyone will question it because much more could be claimed.

It might also be stated with truth that they are more easy, more careless and more unbusinesslike than any other trade or profession.

It must be so because if the nurseryman did not hold his own goods so cheaply the public would place a higher value upon them.

The public is more than ready to accept you and your goods at the value you place upon them.

How often is the high priced medicine specialist asked to donate his services, in comparison with the easy going country doctor, or the manufacturer to donate his goods in comparison to the nurseryman his products?

Nurserymen with few exceptions, such as our correspondent, seem willing to accept the city boy's idea, that everything is free that grows in the country and can be had for the taking or asking.

It is a curious trait in so many people, whose honesty and morality may be above question, they seem to have none at all when it comes to plants and do not hesitate to break valuable plants and steal slips.

Gentlemen:—

Enclosed herewith please find money order for \$1.50 covering subscription. We would not care to be without this paper; might as well be out of business.

Yours very truly,

WM. WARNER HARPER, *Proprietor*
Andorra Nurseries, Chestnut Hill, Pa.

Formal Gardens

THE formal garden is usually "my lady's" special desire when the grounds of a new home are to be laid out, and very often in the renovation and improvement of old ones.

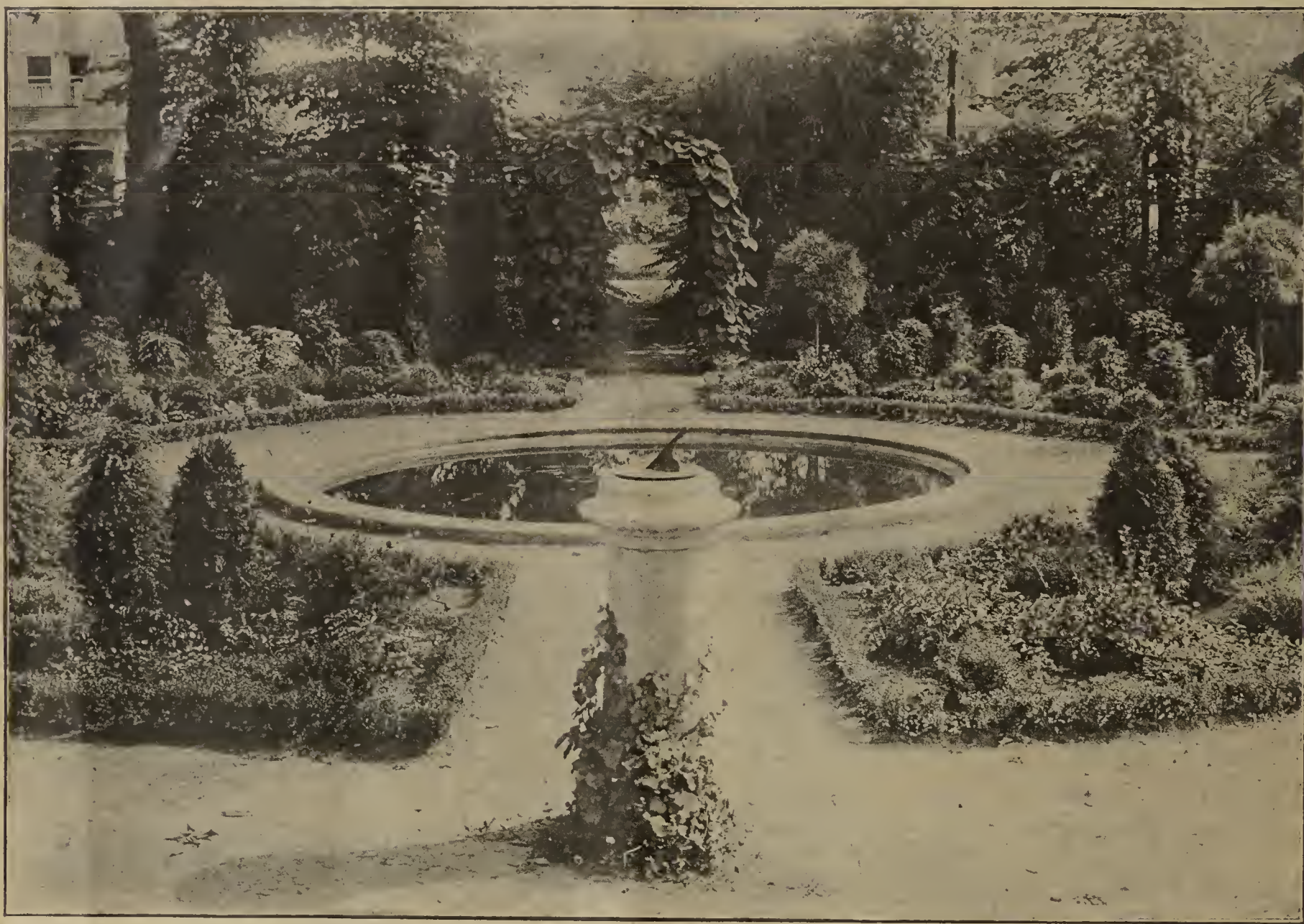
We meet with lots of likes and dislikes in styles of gardening, but the little plot set apart from the general scheme of planting, in the shape of a formal place for informal plants is pretty generally liked.

Some, of course, are very elaborate, with fountains, statuary and masonry, and call for the best there is in the professional landscape architect, but more often it is

hedge, vine-covered fence, or whatever means are used to accomplish it.

The garden enclosed by a fence, covered with Roses or other vines, gives a very pretty effect, and is always worth consideration when planning the formal garden. Hedges of all kinds, of course, may be used, but it is always better to give preference to the evergreen type rather than those that lose the leaves, for the sake of winter effect.

At this point the nurseryman's advice is often valuable, as he knows which plant is best adapted for the locality



A formal garden showing the use of Box-Barberry for edging the beds. A very hardy substitute for the old-fashioned Box

the pet hobby of the owner to have a garden that will express her own individuality, as she puts it, and it is up to the nurseryman to be prepared to help her to do it, for he will be held responsible for all failures that fall short of achieving the vision she had in mind.

"I want my garden to be a dream in lavender and white from the first of April until the frost comes" will likely be the specifications. However, before this dream can be even attempted, the foundation of the garden has to be made, namely the enclosure, whether it be by wall,

under consideration.

Sometimes flowering shrubs are suggested, but these are rarely suitable from the fact that it is only during a very brief season, when they are in flower, that they are attractive. The rest of the year they are ragged and do not serve the purpose intended.

Where a formal line is to be made it is well to recognize the necessity of a clipped or at least a very formal growing plant. For the edging or outlining of beds and walks, Box has been the general favorite. This however,

is rather an expensive plant and often cannot be considered on this account, and in addition to this, in so many localities it is extremely susceptible to injury in the winter. Parts of it will die out and get so badly killed that the lines will be broken. The new dwarf edging plant, Box Barberry, gives promise of winning its way to the front for this purpose. As shown in the accompanying illustration, it is very suitable. The borders shown in the cut were planted late last spring, and it will be seen that it already makes a nice showing. The dainty, soft green foliage and upright fall make it a fair rival of the Box, commonly used. As soon as a good stock is worked up in the nurseries, no doubt there will be good call for it.

It is also well to keep in mind that most of the plants in the old-fashioned garden are deciduous, or in other words, lose their leaves as soon as the frost comes, and it is well to have the framework, such as hedges, borderings and solitary plants of an evergreen nature, so that the transition from summer to winter is not so great.

If there are no evergreens in the garden it will look extremely forlorn as soon as the first severe frost strikes it, whereas, if there is a good framework of evergreen plants, the effects of the change in season will rather be pleasing than otherwise.

The effort to make the dream of white and lavender or any other combination come true is seldom realized, due to the fact that every plant has its own particular season to bloom, and color harmonies and combinations rarely materialize as expected.

Of course it is possible to keep a garden gay from early spring until late fall, but to do this requires constant attention by skilled plantmen, and a supplementary supply of plants from greenhouses or frames. Where there are skilled gardeners, of course, this can be done and the services of the nurseryman are not likely to be called for.

The most charming and interesting gardens are those which are used to just grow plants, without any attempt at color scheme or effect. Plants are all naturally very unconventional in their habit of growth, and little attention needs to be paid to their arrangement. They should, however, be selected so as to insure bloom all through the different seasons of the year, beginning with the early spring flowering bulbs and old favorites such as Columbines, different varieties of Irises, Lilies, Phlox, Paeonies, Coreopsis, Sun-flowers, Michaelmas Daisies and hardy Chrysanthemums, and with the numerous other good things that can be introduced, according to the tastes of the owner.

If the selection is intelligently made there will always be something in bloom.

TREE PLANTING

If the truth were known, after being transplanted many trees fail through the action of the wind. If the top sways ever so little it is reasonable to suppose that almost every root and little fiber moves at the same time. Under such conditions the tree cannot establish itself, as absolute stillness is necessary for the roots to fulfill their functions. The delicate cell walls of the rootlets cannot take up the moisture and food from the earth where there

is the slightest motion.

Expert practical gardeners have long recognized this and take means to prevent movement by staking, cutting back the tops, firm planting and other methods. With large or even medium-sized trees it is not easy to overcome the effect of the wind, especially if the tree stands alone in an exposed position.

A stake cannot well be driven down firm enough to be of much value; besides, it usually chafes the bark and is in other ways objectionable. Three guy wires fastened around the tree three-quarters of the way up the trunk, and fastened to stakes in different directions, is a very effective way of holding the tree steady until the root system anchors it. Care must be taken to prevent the wires from cutting the bark. This method is not always feasible.

A good plan that might be practised more to advantage with fall-planted trees is to pile soil around the trunk to the height of two or three feet and leave it there over winter, removing it in the spring. This practice has much to recommend it where it can be done without looking too unsightly. It not only steadies the trees, but keeps the frost away from the roots to a certain extent. But do not fail to remove it about April, or its action will be detrimental rather than otherwise.

THE PATHOS OF DISTANCE

In England and France I have seen things which I wish could be burned into the conscience of every business man in the United States. I have seen factories in ruins, office buildings blown into bits, commercial districts, miles in extent, lying deserted and silent, grass growing in the streets like places of the dead—everything that years, perhaps hundreds of years of patient industry had built up and passed on as a heritage from father to son—all vanished.

We in America have known nothing like this. We *can* know nothing like it. Thanks to our Allies, these experiences will be kept from us. That factory of yours in New England, that mine of your neighbor's in Michigan, that farm I own in Iowa—they are being protected today by the untold sacrifices of the soldiers, the business men, the women of England and France.

Why then should we complain? Why should we protest that our business is ruined? Why should we bewail lessened profits, cavil at high prices, inconveniences, hard conditions? Why should we rage at the disaster that overtakes our business?

Our business? Our profits? Our lives? Good God, will we ever open our eyes to see the truth? Can we ever repay the debt we owe? The time has come for us, the commercial men of this country, to relieve our French and British Allies overseas of their appalling burden. Their soldiers are now our soldiers, as truly as if they wore our uniform; and our boys are theirs.—*E. T. Meredith in The Nation's Business for August.*

Scientific advertising is perhaps the greatest force in the commercial world today.

By its means the sentiment, desires and actions of entire countries are controlled. Not to recognize it in business, and use it to the limit, shows a lack of ordinary business sense.

LIST OF CURRENT QUARANTINES NOW IN FORCE AFFECTING THE NURSERYMEN

DOMESTIC QUARANTINE

Date palms.—Quarantine No. 6: Regulates the interstate movement of date palms or date-palm offshoots from Riverside County, Cal., east of the San Bernardino meridian; Imperial County, Cal.; Yuma, Maricopa, and Pinal Counties, Ariz., and Webb County, Tex.; on account of the Parlatoria scale (*Parlatoria blanchardi*) and the Phoenicococcus scale (*Phoenicococcus marlatti*).

Hawaiian fruits.—Quarantine No. 13, revised: Prohibits or regulates the importation from Hawaii of all fruits and vegetables, in the natural or raw state, on account of the Mediterranean fruit fly and the melon fly.

Sugar cane.—Quarantine No. 16: Prohibits the importation from Hawaii and Porto Rico of living canes of sugar cane or cuttings or parts thereof, on account of certain injurious insects and fungus diseases.

Gypsy moth and brown-tail moth.—Quarantine No. 27: Regulates the movement interstate to any point outside of the quarantined towns and territory, or from points in the generally infested area to points in the lightly infested area, of stone or quarry products, and of the plants and plant products listed therein. This quarantine covers portions of the New England States.

Five-leafed pines, Ribes, and Grossularia.—Quarantine No. 26: Prohibits the interstate movement of five-leafed pines, currant and gooseberry plants from all States east of and including the States of Minnesota, Iowa, Missouri, Arkansas, and Louisiana to points outside of this area; prohibits further, the interstate movement of five-leafed pines and black-currant plants to points outside the area comprising the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, and New York on account of the white pine blister rust.

Banana plants.—Quarantine No. 32: Prohibits the movement from the Territories of Hawaii and Porto Rico into or through any other Territory, State, or District of the United States of any species or variety of banana plants (*Musa* spp.), regardless of the use for which the same are intended, on account of two injurious weevils, *Rhabdocnemis obscurus* and *Metamasius hemipterus*.

FOREIGN QUARANTINE

Mexican fruits.—Quarantine No. 5, as amended: Prohibits the importation of oranges, sweet limes, grapefruit, mangoes, achras sapotes, peaches, guavas, and plums from the Republic of Mexico, on account of the Mexican fruit fly.

Five-leafed pines, Ribes, and Grossularia.—Quarantine No. 7, as amended: Prohibits the importation from each and every country of Europe and Asia, and from the Dominion of Canada and Newfoundland, of all five-leafed pines and all species and varieties of the genera *Ribes* and *Grossularia*, on account of the white-pine blister rust.

Seeds of avocado or alligator pear.—Quarantine No. 12: Prohibits the importation from Mexico and the coun-

tries of Central America of the seeds of the avocado or alligator pear, on account of the avocado weevil.

Sugar cane.—Quarantine No. 15: Prohibits the importation from all foreign countries of living canes of sugar cane or cuttings or parts thereof, on account of certain injurious insects and fungus diseases. There are no restrictions on the entry of such materials into Hawaii and Porto Rico.

Citrus nursery stock.—Quarantine No. 19: Prohibits the importation from all foreign localities and countries of all citrus nursery stock, including buds, scions, and seeds, on account of the citrus canker and other dangerous citrus diseases. The terms "citrus," as used in this quarantine, includes all plants belonging to the subfamily or tribe *Citratae*.

European pines.—Quarantine No. 20: Prohibits, on account of the European pine-shoot moth (*Evelria bouliana*), the importation from all European countries and localities of all pines not already excluded by Quarantine No. 7.

Citrus fruit.—Quarantine No. 28: Prohibits the importation from eastern and southeastern Asia (including India, Siam, Indo-China, and China), the Malayan Archipelago, the Philippine Islands, Oceania (except Australia, Tasmania, and New Zealand), Japan (including Formosa and other islands adjacent to Japan), and the Union of South Africa, of all species and varieties of citrus fruits, on account of citrus canker, except that oranges of the mandarin class (including satsuma and tangerine varieties) may be imported on compliance with the conditions prescribed in the regulations of the Secretary of Agriculture.

Banana plants.—Quarantine No. 31: Prohibits the importation for any purpose of any species or variety of banana plants (*Musa* spp.), from all foreign countries and localities, on account of the banana root borer (*Cosmopolites sordidus*).

OTHER RESTRICTIVE ORDERS

The regulation of the entry of nursery stock from foreign countries into the United States was specifically provided for in the plant-quarantine act. The act further provides for the similar regulation of any other class of plants or plant products when the need therefor shall be determined. The entry of the plants and plant products listed below has been brought under such regulation:

Nursery stock.—Nursery stock is entered under regulations requiring a permit, foreign certification and marking, reporting arrival and distribution, and inspection at destination. The term "nursery stock" includes all field-grown florists' stock, trees, shrubs, vines, cuttings, grafts, scions, buds, fruit pits and other seeds of fruit and ornamental trees or shrubs, and other plants and plant products for propagation, except field, vegetable, and flower seeds, bedding plants, and other herbaceous plants, bulbs, and roots.

Avocado, or alligator pear.—The order of February 27, 1914, prohibits the importation from Mexico and the countries of Central America of the fruits of the avocado, or alligator pear, except under permit and in accordance with the other provisions of the regulations issued under said order, on account of the avocado weevil. Entry is permitted only through the port of New York and is

limited to the large, thick-skinned variety of the avocado. The importation of the small, purple, thin-skinned variety of the fruit of the avocado and of avocado nursery stock under 18 months of age is prohibited.

WILL PLANTS, VINES AND TREES CONTINUE TO ADVANCE IN PRICE?

By Charles A. Green, Rochester, New York

Nurserymen lost money heavily during the Civil War in this country, and many of them were compelled to go out of business. At the close of the Civil War the prices of plants, vines and trees greatly increased. I am told that apple, pear, plum, cherry and peach trees advanced in price at this period to about \$1.00 each.

No one can tell now how seriously the nursery business may be affected by the present war or what the prices will be at the close of the present war, which at this date seems not far off, but there are certain conditions that are fundamental and can be understood at a glance.

The seedlings, that is the little trees grown most largely in France, in ordinary times are imported to this country in large amounts. These seedlings are the base of the nursery business. During the past few years the French, being actively engaged in war, have not been able to grow these seedlings as heretofore, therefore the supply has been so largely reduced that American nurserymen cannot hope to receive a full supply. Further than this, the shipment of these seedlings from France of late has been precarious and uncertain, therefore American nurserymen have no assurance that they will continue to receive from France these important products, without which the nursery business in this country cannot be conducted as successfully as in the past.

Here is a peculiar circumstance: Nurserymen propagate trees most largely by budding. The buds after being inserted in the seedling stocks have of late years been tied and held firmly in place by a product known as raffia, a silky ribbonlike substance which holds the bud firmly in place until it has obtained a foothold in the little seedling.

Of late it has been impossible to secure a supply of this raffia, which has in past years been imported from Europe. Nurserymen have been obliged to use substitutes. In many instances these substitutes have failed utterly to protect the inserted bud. As a result the budding of many nurseries has been an absolute failure, not only causing nurserymen serious losses but diminishing the supply of fruit trees.

Herein is indicated what certainly cannot be denied, that there is good reason for assuming that the production of fruit trees in this country will be greatly reduced in the next few years.

There is still another reason for higher prices. The winter of 1917-18 was one of the most severe ever known, causing the destruction of a large portion of the fruit trees growing in nurseries of this country. Peach trees in particular were wiped out by the million by the severe winter, and in many instances apple, pear, plum and quince trees were utterly destroyed.

A further reason why higher prices must be expected for fruit trees is that the cost of everything entering into

the production of trees has advanced in price. The price of labor has increased, and the cost of producing a tree is largely labor cost, but aside from this there are many items necessary to the nursery business which cost now more than twice the ordinary price. I refer to rope, twine, burlap, lumber for boxes, labels, paper for lining boxes, etc.

Notwithstanding the prospective advance in price of nursery products, it is profitable to plant fruit trees. The U. S. government has shown its appreciation of the value of fruits as a war product by aiding the industry in many ways.

OBSERVATIONS ON PEAR BLIGHT IN ILLINOIS

It is stated that conditions in central and southern Illinois favor severe outbreaks of pear blight. It is thought that the use of trees propagated on the more resistant Japanese stock may prove to be of practical value for Illinois growers, the grafts being made preferably on the larger limbs to avoid body cankers.

Apple blight was especially severe in southern Illinois in 1914. A study was made in 1915 of the disease on 10-year-old pear trees and of control measures at Savoy, about 1,000 buds being treated with water suspensions of bacilli applied with a camel's-hair brush, half of these being covered immediately with wet cotton to prevent drying out. No significant difference in degree of infection developed between the treated and the untreated lots. Infections through rapidly growing shoots, especially water sprouts, were numerous during portions of the summer following wet weather in 1915, recent infections being seen as late as August 4. Insect agency appears to be important.

In the early spring of 1916 a few holdover cankers were observed on trunks and larger limbs, giving abundant infective material and spreading the disease throughout the orchard. Kieffer pear trees appeared to be more resistant than Garber, as regards pear blight. No exuding cankers were observed after the pears had bloomed.

Bordeaux mixture applied just as the first flowers were about to bloom controlled completely the blossom infection on Kieffer pear trees and did not interfere with the setting of the fruit. Lime-sulphur spraying, started later, was not quite so effective.—*Experiment Station Record*.

The Connecticut Nurserymen's Association held their Annual Summer Outing, August 21, 1918, at Lake Compounce, Connecticut, reaching this delightful spot by auto. Fine turn out, and a good base ball game. In fact, the enthusiastic fans had two games. The losers were so badly beaten that they begged the writer not to mention the score. The feature of the game was the unusual batting ability displayed by Messrs. Campbell and Barnes. In fact, it seemed that the pitcher was unable to get a ball past them.

The management at Compounce is to be congratulated upon the barbecued sheep dinner it served, differing from some resorts, in that we were bountifully served at table.

The Association held no business meeting. Everyone appeared to thoroughly enjoy themselves.

Notes from Arnold Arboretum

THE NEW CHINESE LILACS. Many of the Lilacs discovered by Wilson and other travellers in the recent explorations of western and northern China are now so well established in the Arboretum and in a few other American gardens that it is possible to form an opinion of their value. Observations of the living plants show that too many species were made when botanists had only the dried specimens sent home from China to work with. Now that most of these plants have flowered in the Arboretum and have been again studied it appears that *Syringa Wilsonii* and *S. Dielsiana* are the same as *S. tomentella*; that *S. Sargentiana* is a variety of *S. Komarowii* with a pubescent calyx; that *S. tetanoloba* is *S. Siveginsowii*, and that *S. Rehderiana* is probably only a pubescent form of *S. tomentella*. *S. Komarowii Sargentiana* is not in the Arboretum collection and probably has not been introduced. *S. Rehderiana*, *S. Polaninii* and *S. verrucosa* are still unknown in gardens. As a garden plant the handsomest of the new Chinese Lilacs is *Syringa reflexa* which Wilson discovered in western Hupeh. This is a tall broad shrub with leaves resembling in size and shape those of *S. villosa*. The flowers have long slender corolla-tubes and are borne in long, wide-branched, open, drooping clusters; the flower-buds are red but as the flowers open the corolla becomes dark rose color except the inner surface of the lobes which is white. The wide drooping clusters, and the contrast in the colors of the inner surface of the corolla-lobes and its tube, make *S. reflexa* one of the handsomest and most interesting of the new Chinese Lilacs. Next in merit probably as an ornamental plant is *Syringa Siveginsowii*. This, too, is a tall shrub but the branches are not as stout as those of *S. reflexa*, and the leaves are narrower, pointed at the ends and pale on the lower surface. The flowers are produced in broad erect clusters and are pale rose color and half an inch long. The flower-buds are of a peculiar brownish green color, and as the flowers open gradually from the bottom to the top of the cluster the contrast between the open flowers below and the closed buds above give this plant a peculiar appearance during the week or ten days the flowers are opening. This Lilac was first made known through plants raised in the Arboretum of Max von Sivers at Riga in Russia from seeds sent from some place in Mongolia or northern China, the name of which is not recorded. Later it was found by Wilson in western China, but the plants growing in the Arboretum were obtained from the nursery of Regel & Kesselring in Petrograd. *S. Komarowii* has leaves which resemble those of *S. reflexa* but the flowers are produced in short, compact, nearly cylindrical clusters nodding on long stems. The flower-buds are bright red and very conspicuous, and the open flowers are deep rose color. This Lilac sometimes blooms profusely when still a small bush. *Syringa tomentella* promises to grow taller than the other new Chinese Lilacs for some of the plants in the Arboretum are now nearly ten feet high. The leaves resemble those of *S. villosa*, and the flowers are pale rose

color or white, and are borne in narrow erect clusters. None of the Arboretum plants have ever produced many flowers and *S. tomentella* promises to be one of the least desirable of the new Lilacs as a garden plant. *Syringa Julianae* flowers earlier than most of the new Chinese Lilacs and the flowers are already fading. As it grows here this is a compact low shrub nearly as broad as high, and for several years has covered itself with short clusters of rose-colored and white fragrant flowers. Related to the Chinese *S. pubescens*, it blooms much later than that and other related species, and is an excellent addition to the list of Lilacs which can be grown in our gardens. *Syringa Wolffii*, which has dark violet-purple flowers in short compact clusters, is another good garden plant in this climate. This species, too, was first cultivated by Von Sivers at Riga who obtained it from some place in northern China which is not known. The other new Chinese Lilacs in the Arboretum, *S. Meyeri*, *S. microphylla*, *S. pinnatifolia* and *S. yunnanensis* have comparatively little decorative value and are curiosities rather than good garden plants.

THE LINDENS. Linden-trees are very generally distributed in all the temperate regions of the northern hemisphere with the exception of western North America and, in addition to numerous species, several hybrids are cultivated. All the species are very similar in flower and fruit, and chiefly vary in the size and shape of the leaves, in the presence or absence of hairs on the leaves and branchlets, and in the nature of their hairy covering when it occurs. A fact which is not easy to explain is the presence in the flowers of all the American species of petal-like scales opposite the petals and connected with the clusters of stamens, while in the flowers of all the Old World Lindens such scales do not exist. Another fact about Lindens which is not easy to explain is that the European species grow much better in Massachusetts than the species of eastern Asia, although as a rule European trees do not succeed here as well as the trees of eastern Asia. The five European Lindens and the species from the Caucasus all flourish in the Arboretum and some of these trees have grown in New England to a large size. The Asiatic species, however, although they have not been many years in this country, give little promise of becoming really good trees here. *Tilia japonica*, which has been growing in the Arboretum for twenty-five years, although still a small tree, is, however, perfectly healthy; it is related to the small-leaved Linden of Europe (*T. cordata*) and, like that tree, is one of the latest Lindens to flower here. The graceful drooping branches and pale under surface of the leaves make this small tree attractive, and it is the first of the Lindens here to unfold its leaves in the spring. The common Linden of the north (*T. glabra* or *americana*) is not as good a tree here as several of the European species, but there are several other American Lindens which have been overlooked by American planters, and misunderstood or

neglected by American botanists, and among them are handsome trees. Some of these are growing in the Arboretum, and it is not improbable that the Arboretum collection will be improved at the end of a few years when it is hoped the American Lindens will be better known.

Lindens have always been more valued as ornamental and shade trees in Europe than in the United States. No other trees have been more generally planted in some of the countries of central Europe, and in these countries attention has been paid to the collection and perpetuation of several interesting and valuable varieties and hybrids. The Arboretum collection, which is arranged in the meadow on the right-hand side of the Meadow Road, now contains forty-five species, varieties and hybrids. Many of these trees have flowered for several years, and some

of them are large enough to show the habit of the different species when thirty or forty years old. Judging by the Arboretum collection, the handsomest of these trees which can be grown in this part of the country are the European *T. vulgaris*, *T. cordata*, *T. tomentosa*, and *T. petiolaris* and the American *T. heterophylla*, *T. Michauxii* and *T. neglecta*, and the hybrid *T. spectabilis*. This tree is believed to be a hybrid of *T. americana* with *T. petiolaris* or *T. tomentosa*. It has leaves as large as those of the American tree but silvery white on the lower surface. The variety *Moltkei* has rather thicker but equally large leaves. These trees are among the handsomest of all Lindens, and no Lindens in the Arboretum collection grow more rapidly.

Essentials to a Food Program for Next Year

BY GIFFORD PINCHOT, LL. D., Milford, Pennsylvania.

Food has been our greatest contribution to the war, and it is likely to continue so. Heroic France is today actually so short of food that she has been obliged to cut down her consumption of wheat 25 per cent, her consumption of sugar 49 per cent, and her consumption of fats 48 per cent, in spite of all we could do to help. That fact brings home the part the food we alone can supply has been playing and is to play in winning the war. Great Britain, also, is dependent still for 65 per cent of her essential foodstuffs on Canada and the United States.

Food is our greatest contribution to the war, and our greatest domestic problem as well. From March 1, 1916, to March 1, 1917, the reserve of the six principal grains in the United States was reduced by an amount equal to one pound per day for every man, woman, and child in America. The difference between the amount of grain in our country at the beginning and at the end of that one year was greater than any crop ever raised in the United States, with three exceptions. We are not only faced with the duty which has been laid upon us to supply food to our Allies and to the neutral nations of the world, a duty which we must perform or lose the war, but also with the duty to restore our own reserve of grain to a point where a single bad crop cannot mean famine in the land. The food situation is serious, if anything can be.

The amount of food available can be increased by producing more or by using less. Nine-tenths of our attention in the United States seems to have been given to saving what we had instead of to the vastly more fundamental question of producing more. If we had concentrated on the question of larger production a reasonable fraction of the attention, ingenuity, and effort that has been given to conservation, there would have been far more food for our Allies and our own people, and much of the painful need for saving as well as the anxiety over supply would have disappeared. It would be hard to imagine a more grievous and unnecessary mistake.

It is substantially too late to increase the crop of 1918—that is fixed, except as cultivation and the weather may affect it still. It will be large or small, as may happen, and there is little we can do about it. The indications are that an exceptional spring will give us far more wheat than we had a right to expect from the area planted. But we cannot safely count on a repetition of such good luck. Now is the time, while action can still produce results, to plan for the crop of 1919.

Increase of crop production is mainly a question of dealing with men. To secure a larger crop is a matter of getting the farmers to produce more, and in order to do that we must deal with them as they are, and take measures such as will fit their circumstances, meet with their approval, and therefore produce results.

One of the main difficulties in our food situation has been that the officials in control have not understood the farmer. We have had the city man's point of view in control of the food question, and not the point of view of the man who produces the food. But the farmer is the man who grows the crop, and to get him to increase his crop you must reach his heart and his mind. But he cannot be reached along the lines that appeal to the banker, or the merchant, or the brick-layer, or the hand in a factory, but only along lines that fit in with the ways of thinking and living of the man who actually walks in the furrow and milks the cow. And that has not been done.

I am not going into the question of the mistakes that have been made. We are at war, and the past is valuable mainly as a

warning. The thing to be done now is to provide for the next crop, leaving the story of what has already happened to be written afterward. When that story is told, the facts concerning the relation of our government to the farmers during our first year in the war will make the story of our blunders in aircraft production look small in comparison. If our farmers, in spite of the failure of the government in organization and understanding, in spite of the lack of labor, credit, and supplies, still increase or maintain the crop production of last year, it will be an achievement far beyond all praise, and it will have saved the nation from losing the war.

The farmer is a member of a highly skilled profession. There is no other man who works for as small a wage who is as skilled a worker as the farmer, and there is no other man who requires as large a field of knowledge to be successful with the work he does. In talking recently to a body of farmers, I assumed that it takes about three years to make a skilled farm hand. Immediately a gray-haired man in the audience spoke up and said, "Ten." To make a farmer capable of directing the work of a farm of course takes very much longer. All this is not generally understood in town. I had occasion, the other day, to tell an energetic, robust and intelligent city man that he could not earn his keep on a farm. He was inclined to be hurt, and very much surprised. "Why," said he, "I supposed anybody could work on a farm." Said I, "A farmer wouldn't have you on his place," and it was true.

A farmer is not only a member of a highly specialized profession,—we must remember that he is also a business man in a business which involves taking larger risks than almost any other business. In addition to all the ordinary chances of business, he is subject to the weather to a degree that is otherwise practically unknown. More than that, he has his own way of thinking, and having reached a decision he is slower to change than the city man. Our city people are inclined to look down on the farmer. They sometimes think of him as being different from them, and therefore inferior. But this is very far from true.

When all is said and done the man who owns the land from which he makes his living is the backbone of the country. Furthermore, with his family he makes up one-third of the population. Even from the point of view of organization he is not to be despised, for our organized farmers are more in number than the whole membership of the American Federation of Labor.

The demands which will be made upon us for food in 1919 and 1920 will be enormous, and they will be made absolutely irrespective of whether the war ends or not. When victory comes we shall have more, and not less, people to feed than before, for the demands of half-starved Germany and Austria will be added. The ending of the war will produce no more food and no more ships. It will not bring the wheat of India or Argentina or Australia a mile nearer to London or Berlin. The demand on us in 1919 will be colossal whether the war ends or not.

What then must be done to reach the farmer, supply his indispensable needs, and make it possible for him to produce in 1919, when he would like to produce what the nation and the world vitally needs that he should produce, but what the bungling of men in high places bids fair to keep him from being able to produce this year?

First, wipe out the distinction which has been held, and most harmfully held, between the production of food and the use of food. Our conservation measures have been directed upon the

theory that the production of food was unchangeable, like the tides or the coming of day and night, and that nothing that was done with the food after it was grown could increase or decrease the growing of food. That theory is wholly mistaken. Very much to the contrary, everything that is done to conserve food, to regulate price, to restrict use, to promote saving, has its direct effect on production. Food is a commodity, and the law of supply and demand, when not repealed by monopoly, applies to food as it does to any other commodity. Conservation measures affect demand. Therefore they must influence supply, or production also. The farmer determines what he is going to grow next year, subject to the demands of his rotation, by the success he has had with the things he grew last year. He is in business to make money. Therefore, he will grow most of what pays best, and he cannot do otherwise.

Take the matter of milk, for example. Whatever reduces the consumption of milk tends to result in less milk for those who need it instead of more. The farmer must milk his cow daily. If, because of any "Save the Milk" campaign, the demand for his milk is cut off, in self-defense he must cut off the supply. He cannot produce milk at a loss. He cannot turn a tap, and hold his milk for a later market. So he reduces supply to the level of demand by selling the cow to the butcher. But if the demand increases at a living price, he will keep his cow and raise more. The more consumption of milk is stimulated, the greater will production be, and the more consumption is reduced, the less the supply of this best and cheapest of animal foods for all of us. A "Save the Milk" campaign is a blunder into which only a city mind could fall.

Chickens, potatoes, veal, lamb, and other produce might likewise be cited to show how the conservation of a farm product has an immediate and direct influence on the production of it, and how wise and skillful a hand is needed to deal successfully with the amazingly sensitive and pervasive relation between agricultural production and the conservation of agricultural products.

The first thing to be done in preparing for a crop in 1919 large enough to meet our foreknown needs is then to wipe out the artificial wall which has been created between food production, which has been assigned to the Department of Agriculture, and food conservation, which the Food Administration supervises and controls. If actual consolidation is impracticable, then at least such co-operation should be enforced between them as will effectually prevent the taking of any conservation measure until farm experts have considered and approved it in relation to production.

The second thing is to see that the farmer has the means with which to produce. Of these, the most important is labor. Man power in agriculture has exactly the same value as man power in war. Since neither high school boys, nor failures from the slums, nor casuals from the streets, nor women on vacation can supply the year-long need of the American farmer for skilled labor, since even before the war began farm labor was probably 10 per cent short, since more than a quarter of our National Army is composed of skilled farm workers, and since it is not easy to grow more crops with less men, the labor situation is critical.

Normally, there is about one farm laborer to every two farms in the United States. We cannot feed our people and our Allies without the farmer's hired man, but farm help is hard to find and hard to hold. As a rule, the farm laborer has small pay, long hours, complicated tools, and, therefore, the necessity for very high skill in handling them. He does a great many different things, and he must do them with skill or not at all. Then he is often quite isolated; he suffers from exposure to heat and cold; he has no holidays and very few pleasures; and he can get better pay and easier hours elsewhere. It must be made worth while for farm hands to work on the farm.

The government must give the farmer reasonable confidence that in 1919 he will have labor, that he will have seed, fertilizer, farm implements, and credit,—all upon terms that will enable him to produce without loss. There is nothing so destructive of business enterprise as the lack of confidence, and the American farmer has not had confidence this year. It was his patriotism, and nothing else, which led him to plant 42,000,000 acres of winter wheat.

The farmer knows as well as any one that the price of \$2.20 a bushel for wheat was not fixed in order to guarantee him a high price. It was fixed in order to guarantee the city consumer against a higher price. The \$2.20 limit was not an effort to keep the price of wheat up, but a successful effort to keep the price of wheat down. Price fixing of that kind does two things—it discourages production, and it increases consumption,—and these are just the two things that, in the face of a scarcity, we cannot afford to have done. I have no doubt that our acreage of winter wheat this year would have been as large as the Department of Agriculture asked for, if it had not been for the knowledge of the farmers that the price they were getting was being held down by artificial restriction when the prices they were paying were rising at pleasure. As it was, the area planted to winter wheat,

while very slightly larger than for 1914, was no less than five million acres smaller than the Department of Agriculture indicated as being necessary to meet the needs of this country and of our Allies. That is the essential figure—five million acres less than the Department of Agriculture asked for. Comparisons with normal times are meaningless or misleading now. The true standard of judgment is what we need now to win the war, not what we used to need in peace.

The farmers raised a great crop last year, at the urging of the government. Many of them lost by their patriotic effort because the marketing facilities were not properly organized. Men who even sent their wives and daughters into the fields found themselves at the end of the season very much out of pocket. The point is not so much that they lost money, but that they cannot lose money and go on farming. The average farmer in this country gets only about \$400 cash a year. He cannot keep on farming if he loses many acres of potatoes, as many and many a farmer did in Pennsylvania and other states, when it costs him \$90 an acre to put those potatoes in.

The farmer sees that nearly every other producer of the things essential for carrying on the war is assured of a profit. He reads that at Hog Island the government is furnishing money, putting houses, finding labor, and then guaranteeing a definite percentage of return to the men who undertake the work. He reads of the same thing in other war industries. He has heard that the government is going to put billions of dollars into such industries at huge aggregate profits to their promoters. He does not want huge profits himself,—well he knows he will not get them—but he does want reasonable business security, and it is fair and right that he should have it. At present it is denied to him, and to him almost alone.

Finally—and this, I think, is the most essential need in the whole situation—the farmer must be taken into partnership in the handling of the war. So far as I know there has not been a representative of organized farmers in any position of high responsibility in any organization in Washington charged with the conduct of the war. A third of the people of the United States, who have been producing food, the admitted first essential for the successful conduct of the war, have been denied a voice in dealing with the great questions, even the farm questions, which concern the war. It does not amount to representation for a third of the people of this country to occasionally call a few farmers to Washington for a few days, there to tell them what has been done and secure their approval.

The treatment of the organized farmers may well be contrasted with the proper recognition that has been given to organized labor. A special branch of the Council of National Defence was established to represent it, and organized labor has from the beginning been properly recognized and continuously called into consultation. All I ask is that the enormous body of organized farmers, representing the largest single element among our people, supplying a more essential ingredient for the success of the war than any other, should themselves have that proper consideration, which is admittedly proper in the case of organized workers off the farm, and certainly is no less proper in the case of organized workers on the farm.

The farmer feels deeply that he has been left out. Again and again, through the Federal Board of Farm Organizations, he has offered his services; again and again he has asked for a working partnership in the war; urgently and repeatedly he has called attention to his lack of necessities without which it would be impossible for him to carry out as fully as he would like to do the duty which the war has imposed upon him. Grudging and merely ostensible recognition, and officially inspired reproof have been substantially the only results. Now is the time, well in advance of the crop of 1919, to call the producers of this country into consultation, to see to it that the farmer's point of view is fairly represented in dealing with farm questions, that matters which are within the knowledge and the competence of this highly trained class of men should no longer be dealt with as they have been dealt with hitherto—almost purely from the point of view of men who were ignorant of the farmer's mind, and apparently altogether out of touch with the conditions under which the farmer does his work.

This is my last word. Remember that farmers are just as different from city men as city men are different from seamen, and that in dealing with farmers, as in dealing with any other highly trained and specialized body of men, success depends on the use of methods which they understand. This fact the city mind seems wholly unable to grasp, and it is the city mind which is in charge of this war. The one thing most needful in order to secure for the world in 1919 a crop equal to the need we know is coming, is to make the farmers of the United States cease to feel that they are outsiders in the war, exhorted and preached at by men who do not understand them, and to take them into a really effective and equal working partnership, and to see that they are recognized as partners on that basis in the winning of this war for human liberty.

A Pleasing Sample of French Landscape Gardening

An interesting post-card was received from one of our boys in France, the name of the owner of the residence and locality were censored, which we considered well worth reproduction in the National Nurseryman, mainly on account of the landscape treatment around the residence.

The landscape treatment is quite a contrast to the style practiced in this country. It will be noticed that every

front are evidently the Bay trees in square boxes.

The plant in the center of the lawn has the outline and habit of a box bush. The tall columnar tree to the left of the picture is possibly a very fine specimen of the Irish Yew or else one of the Arborvitae, the latter most likely.

The large tree between it and the house has the outline of the Red Maple or one of the Oaks. The three conifers appearing above the roof of the house are evidently var-



A postcard from one of our boys in France, showing a pleasing sample of French Landscape Gardening.

tree and plant is an individual specimen, and yet a pleasing combination is obtained as a whole.

The individual outlines of the trees show to their full advantage, and give varying contrast with each other. They are arranged rather to frame the house than to hide it, as is so often done in this country.

It is practically impossible to identify for certain the various plants seen, but the round headed trees across the

eties of Abies or Picea, while the portion of the tree appearing on the right side of the picture, suggests the Beech.

The fence along the front suggests the neatly trained English Ivy. Although the list of plants used is comparatively small, most will agree that the effect is extremely pleasing and much to be preferred to the massed plantings commonly seen in this country.

A NEW CONTACT INSECTICIDE

Under Scientific Notes in the Journal of Economic Entomology, William Moore gives an account of a promising new Contact Insecticide. From the results of a series of experiments, it has been determined that the most efficient contact insecticides must be of an oily or soapy nature. Based upon these observations, a new contact insecticide has been made by the formation of a soap or soap-like salt by the union of nicotine and oleic acid. This chemical is nicotine oleate. It dissolves in soft water forming a soapy solution which may be used to emulsify an animal, vegetable or mineral oil.

The following experiments give an idea of its value. First, Nicofume, containing 40 per cent of nicotine diluted with water to give a nicotine content of 1 part in 1,000 of water, killed 95 per cent of the chrysanthemum aphid. Nicotine oleate, diluted to give 1 part of nicotine

in 1,500 parts of water, killed 96 per cent, while diluted to 1 part of nicotine in 4,500 parts of water killed 63 per cent.

Second, Nicofume, diluted to a nicotine content of 1 part in 1,500 with 2 parts of laundry soap added, killed 93 per cent of the chrysanthemum aphid, while the nicotine oleate with a nicotine content of 1 to 2,250 killed 97 per cent.

Third, Nicofume in aqueous solution does not kill mealy-bugs. Nicotine oleate used at the rate of 1 to 500 will kill a few mealy-bugs and a few egg clusters. Two per cent of a vegetable, animal or mineral oil emulsified in the nicotine oleate solution will kill mealy-bugs and their eggs. An emulsion containing 1 part of nicotine in 500 parts of water with 2 per cent kerosene killed 79 per cent of the adult mealy-bugs and their older larvæ, 98 per cent of the eggs, and 98 per cent of the young larvæ.

Fourth, Preliminary experiments have shown that

about 85 to 90 per cent of the soft scale on greenhouse plants may be killed using nicotine oleate at a dilution of 1 part of nicotine to 500 parts of water.

Fifth, Preliminary experiments have shown that adults and larvæ of the white fly may be killed at the same dilution as used for the soft scale.

All experiments mentioned were conducted under laboratory conditions, care being taken to hit all the insects used in the experiments. Under field conditions it may be necessary to use a higher percentage. Nicotine oleate being nonvolatile it is more necessary to insure striking all insects than in the use of a volatile compound like nicofume.

Nicofume oleate may be made directly from any nicotine preparation containing free nicotine. Two and one-half parts of a 40 per cent nicotine solution unites with $1\frac{3}{4}$ parts of commercial oleic acid or red oil. Four and one-fourth parts of this soap will then contain 1 part of nicotine or will equal $2\frac{1}{2}$ parts of the 40 per cent nicotine solution. Two and one-half quarts of 40 per cent nicotine solution costing about \$7.00 can be mixed with $1\frac{3}{4}$ quarts of commercial oleic acid costing about 90c. making $1\frac{1}{4}$ gallons of nicotine oleate. For spraying to control plant lice, where a gallon of a 40 per cent nicotine solution costing about \$11.00 would be used to make 500 gallons of spray, 1 gallon of nicotine oleate costing about \$6.50 would make 650 gallons of a spray solution as effective if not more effective than the spray containing free nicotine. The nicotine oleate will cost the farmer about \$1.00 a hundred gallons where the free nicotine spray will cost \$2.20 per hundred gallons.

To make the oil emulsion spray with nicotine oleate 10 parts of kerosene is mixed with $1\frac{1}{4}$ parts of commercial oleic acid and then $2\frac{1}{2}$ parts of 40 per cent nicotine solution is added and thoroughly shaken. Ten parts of water is then added and again thoroughly shaken. For use against mealy-bugs, white fly and soft scale this quantity is then mixed with 480 parts of soft water:

In sprays where nicotine oleate is used the spray water must be soft (rain or distilled water). To make nicotine oleate only those tobacco extracts containing free nicotine can be used. The stearate or palmitate of nicotine may be made in the same way, but is not as effective a spray as the oleate. Nicotine oleate is not volatile, hence should not be used on plants to be eaten, such as lettuce. The effect on plants has not been completely studied although sprays containing nicotine oleate equal to 1 part of nicotine in 100 of water did not injure tomatoes or coleus. Slight injury was noted on tender leaves of greenhouse roses when sprayed at the above strength.

On dormant trees the use of a rather nonvolatile oil such as linseed, cottonseed, or fish oil emulsified with nicotine oleate should be valuable for the destruction of insect eggs or scale insects.

A patent has been applied for this compound and when obtained will be given to the public so that anyone will be able to manufacture it.

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Largest assortment in New Eng-
land. Evergreens, deciduous trees,
both common and rarer varieties.

Sturdy, choice stock that can be
depended upon. Send for catalog
and special trade prices.

The Bay State Nurseries

North Abington
Mass.

SHRUBS

This New England soil and cli-
mate produce fine sturdy shrubs.
Special trade prices. By the thous-
ands, hardy Native and Hybrid Rho-
dodendrons—transplanted and accli-
mated. Send your lists let us est.

When writing to Advertisers please mention the National Nurseryman.

Fall 1918

Spring 1919

Est. 1884

400 Acres

Capital \$60,000.00

WE have our usual line of Cherry, Sweet and Sour; Apple, Peach, Pear, Plum, Quince; also Shrubs and Ornamentals.

ALL UPLAND GROWN

We will be glad to send you our wholesale price list.

MALONEY BROS. & WELLS CO.

Dansville, New York

Upland grown trees transplant best

NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER—We offer all or any part of an accumulation of long Nursery Bands one inch in width and sixty inches to one hundred and twenty inches in length, at a reduction of twenty dollars a ton. This offer holds good until stock is disposed of.

WRITE US

COVERING YOUR WANTS IN STEEL BANDS

American Steel Band Co.,

888 Progress Street,

ALLEGHENY, PA.

THE CHASE LABELS

For Nurserymen and Florists are Excelled by None

Plain, Painted, Wired with Tinned or Copper Wire and
PRINTED IN ANY MANNER that may be called for

Prices as low as First-Class Work and Unequalled Promptness in Delivery will justify.

THE BENJAMIN CHASE CO.

P. O. Address, DERRY VILLAGE, N. H.

Western Union Telegraph, DERRY, N. H.

Subscribers to "Nurserymen's Fund for Market Development."

"BUDTIE"

What is it?

There will be no Raffia for sale this year. Government requisitioned all of it for war purposes.

What will you do for budding this year?

USE "BUDTIE" OF COURSE

Write us for samples and prices at once.

THOMAS B. MEEHAN CO.

Introducers of "Budtie"

DRESHER,

PENNA.

Subscribers to "Nurserymen's Fund for Market Development."

1918 N. C. Peach Pits

Practically all old seed are gone, and we are offering new crop subject to supply at \$3.00 per bushel of 50 pounds, sacked, f. o. b. cars shipping point. This is our very best price regardless of quantity. This quotation is subject to change without notice. It is likely that seed will advance again soon.

J. Van LINDLEY NURSERY CO.

Pomona, N. C.

Subscribers to Market Development Fund.

Bamboo Cane Stakes

Natural 6 ft., 2000 per bale

" 9-12 ft., 400 "

" 6-9 ft., 600 "

Write for prices

McHutchison & Co., 95 Chambers St., N. Y.

Blue Spruces

Colorado and Kusters

These trees are prominent in any planting. Their color, form and habit commend them to every planter. Our trees are grafted specimens and have been frequently transplanted.



COLORADO BLUE

(Specimen Plants)

50	2 to 2½ ft.
75	2½ to 3 ft.
100	3 to 3½ ft.
100	3½ to 4 ft.
100	4 to 4½ ft.
100	4½ to 5 ft.
75	5 to 5½ ft.
50	5½ to 6 ft.
25	6 to 7 ft.
25	7 to 8 ft.

KOSTER'S BLUE

(Specimen Plants)

100	2 to 2½ ft.
100	2½ to 3 ft.
100	3 to 3½ ft.
100	3½ to 4 ft.
100	4 to 4½ ft.
100	4½ to 5 ft.
100	5 to 5½ ft.
100	5½ to 6 ft.
25	6 to 7 ft.
25	7 to 8 ft.

Right now is a good time for you to place an order for your requirements; we will ship when you say.

HARRISONS' NURSERIES,
Berlin, J. G. Harrison & Sons Maryland

Subscribers to "Nurserymen's Fund for Market Development."



THE NATIONAL NURSERYMAN



OCTOBER 1918

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of

Apple, Cherry, Peach
Berberis, Spiraea Van
Houtte, Other Ornamentals
Shrubs, H. P. Roses, Etc.

Will be pleased to quote on your list of wants

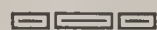
I. E. Ilgenfritz' Sons Co.
Monroe, Mich.

Subscribers to "Nurserymen's Fund for Market Development."

MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

Shenandoah, Iowa



Our Specialty

A large and complete line of high quality Nursery Stock
for the wholesale trade.

We still have a good assortment of FRUIT TREES,
SMALL FRUITS, SHADE and ORNAMENTAL TREES,
SHRUBS, ROSES and VINES.

With our superior storage facilities we are able to
furnish a good assortment of stock for shipment until the
middle of May.

ASK FOR TRADE LIST AND BULLETINS.

We are subscribers to the NURSERYMEN'S FUND FOR
MARKET DEVELOPMENT, a co-operative national campaign
to create new business. Ask about it.

Progressive, Superb
and Peerless
...Everbearing...
Strawberry Plants

We can supply you fresh dug every
day. Healthy true-to-name, well root-
ed at attractive prices.

Address

The W. F. Allen Company
Salisbury, Maryland

"BUY Liberty Bonds, then buy from our October
Bulletin, and the profit on the goods we sell you
will help pay for them.

A fine assortment of

APPLES
PEACHES
PLUMS
ROSES

and a whole lot of more scarce items. If you have not
read it thru carefully you better do so. It will save you
money, trouble and anxiety next spring by ordering now
for immediate shipment, late fall, or early next spring."



C. R. BURR & CO.
Manchester, Conn.

Subscribers to "Nurserymen's Fund for Market Development."

The
Preferred
Stock

FABLE.



The
Preferred
Stock

A leopard once met a lion down by a water hole in the jungle and said, "Why do you go about the jungle roaring the way you do?"

The lion said, "I believe in advertising. If it had not been for my advertising I would never have been made the king of beasts. It pays to advertise, and I never fail to grasp an opportunity to do it."

It so happened that a rabbit who was crouching down in some weeds heard this conversation, and appreciated the logic of the thing. Next day, as he was nibbling at a big tree, he filled his lungs, threw back his head, and let out what he expected to be a roar; it resulted in a high-pitched squeak. A fox happened to be on the other side of the tree, and hearing the squeak went around to investigate. As a result he ate the rabbit.

Now the moral of this parable is, it is folly to advertise if you don't have the goods. We have the goods and we are not afraid to advertise. We not only have the goods, but can give you prompt service.

 **OUR FALL TRADE LIST HAS BEEN MAILED OUT.** Did you get your copy? If not, it will be worth your while to write for it and get on our mailing list. Please use printed stationery when writing, though, or enclose business card. We send it only to the trade. 

JACKSON & PERKINS CO.,

Newark, New York

The
Preferred
Stock

Subscribers to Nurserymen's Fund for Market Development

The
Preferred
Stock

FRAMINGHAM QUALITY NURSERY STOCK *for* YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Now is the time to prepare for Fall business. Make us a visit during your vacation, inspect our stock and reserve what you require for Fall shipment.

Framingham Nurseries
FRAMINGHAM
MASS.

The Book about Princeton Products

Is being printed now and will be mailed out soon. If you don't get a copy, notify us and we shall be mighty glad to send another.

Our 1917 List was unusual; the new one is even more distinctive. That is because our business is unusual; unusual in plan and methods; in the assortment we grow; in the way it is grown and in the quality of our products.

From Abelia to Zanthorhiza, we offer a complete assortment; we are not limited either by ability or soil, to the production of only a few things; we have Peaches and Ampelopsis, Tea's Mulberry and Taxus brevifolia, Retinosporas and Roses. And other things.

In our List, we are using a lot of Photographs of our 1918 blocks, just to give buyers at a distance some idea of the size and quality of our stock. Most Nurserymen are handicapped by having to buy without seeing the material and while photographs are not wholly adequate, they help. As "two to three feet" doesn't attempt to establish anything except the height and only comes within fifty per cent. of fixing that, we fall back on pictures.

Get that List; you'll find it interesting; you can make it profitable to you, too, if you care for unusually good stock at prices that measure values. We sell to Nurserymen only.

Princeton Nurseries

Growers for Nurserymen Exclusively

at Princeton, in New Jersey

October first.

When writing to Advertisers please mention the National Nurseryman.

PAINESVILLE NURSERIES

BIDDING FOR FALL BUSINESS

FRUIT TREES

APPLES
PEARS
PLUMS, Etc.

SMALL FRUITS

CURRANTS
GOOSEBERRIES
BLACKBERRIES, Etc.

SHRUBS and VINES

BUDDLEIA
CALYCANTHUS
CYDONIA
HYDRANGEAS
PRIVET
SPIREAS
WEIGELA
AMPELOPSIS
CLIMBING HSKLS, Etc.

ORNAMENTALS

ASH
Cut-leaf Wpg. BIRCH
CATALPAS
CORNUS
ELMS
HORSE CHESTNUT
JUDAS
LINDENS
MAPLES
MULBERRIES
—Tea's Wpg. and Globosa
POPLARS
SALISBURIA
SYCAMORE
WILLOWS, Etc.

ROSES

HARDY PERENNIALS

PEONIES, PHLOX, IRIS
and complete
General Assortment

* We will have no Dutch Bulbs this Fall; otherwise,
"BUSINESS AS USUAL."

Glad to handle your Want Lists.

THE STORRS & HARRISON CO.

NURSEYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Blota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa

Subscribers to "Nurserymen's Fund for Market Development."

Heikes—Huntsville—Trees



Established 1872

1500 Acres

FRUIT TREES ROSES and other ORNAMENTALS

For the wholesale trade.
All of our own growing.

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

For Fall of 1918

Ornamentals, Shade Trees, Evergreens,
Perennials, Fruits, etc.

A large stock of the following:

Cherry Trees, 2 yr.
Apple Trees, 2 and 3 yr.
Peach Trees, 1 yr.
Norway Maple up to 2 inch.
Am. Elm, all sizes.

Write for special prices on car lots.

C. M. Hobbs & Sons
Bridgeport, - Indiana

Subscribers to "Nurserymen's Fund for Market Development."

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of Own Root Roses

ORNAMENTAL TREES SHRUBS
BERRIES CLEMATIS
EVERGREENS PEONIES PHLOX

and

HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY
GENEVA, N. Y.

70 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE

THE

North-Eastern Forestry Co.

CESHIRE

...Connecticut...

We are now ready to quote lowest prices on
FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities. Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries
Sparta, Ky.

For FUMIGATION With
HYDROCYANIC ACID GAS
"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by
The Roessler & Hasslacher Chemical Co.
100 William St. - - New York, N. Y.

SOMETHING YOU NEED

A large stock
In all sizes

We have

Well grown
Priced right

CALIFORNIA PRIVET
NORWAY SPRUCE
CONCORD GRAPE
SILVER MAPLE
SUGAR MAPLE
SYCAMORE
RED BUD
DOGWOOD
CYPRESS
LARCH
ASH
ELM
IRIS

SPIREA VAN HOUTTEI
COMMON SNOWBALL
COTONEASTER
FORSYTHIAS
BARBERRIES
WEIGELIAS
TAMARAX
MAHONIAS
SYRINGAS
ARALIA
SUMAC
LILAC
PEONIES

and our usual supply of similar stock found in a complete nursery.

H. F. Hillenmeyer & Sons. Lexington, Kentucky
"In the land of the Blue Grass"

FOR FALL DELIVERY

We offer

Amoor River Privet

Ibota Privet

Golden Syringa

Hydrangea P. G.

Write for prices in large or small quantities

J. W. ADAMS NURSERY CO.,
Springfield - : Mass.

HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

**Rawhide Brand of Shipping
Tags and Tree Labels**

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.

West Chester, Pennsylvania

For FALL 1918

We offer a Complete
List of

Shade Trees, Shrubs, Evergreens

WILL BE PLEASED TO
SUBMIT PRICES

AUDUBON Nursery, P.O. Box 731, Wilmington, N. C.

P. OUWERKERK,

No. 216 Jane St., Weehawken Heights, Hoboken, N. J.
Rhododendrons, Clematis, H. P. Roses, Hardy Azaleas,
Paeonies, Magnolias, Box Trees, Fancy Conifers, Hydran-
geas and Shrubs, our specialties at our HOLLAND NUR-
SERIES. Some of the goods on hand here during the
packing season.

TREE SEED

Large assortment of Tree, Shrub and Fruit
Seeds for ornamental and forestry purposes.
Send for catalogue. **CONYERS B. FLEU, Jr.**
Germantown, Philadelphia, Pa.

CHERRY TREES

We offer, two and three year cherry, also some nice
2 year climbing roses, on own roots. All select stock.
Write for prices in car lots.

MILTON NURSERY COMPANY,

Milton

Oregon

Seeds For Nurserymen

Apple, French, Japan and Kieffer Pear, Myrobolan Plum and
Quince Seeds. Also Tree, Shrub and Evergreen Seeds in a
large assortment. My Catalogue contains complete list with
Prices. Send for a copy.

THOMAS J. LANE
SEEDSMAN

DREESHER,

Penna., U. S. A.

WE OFFER

Grape Vines, Currants and Gooseberries
in all varieties and grades, also
Grape and Currant Cuttings and Light Grade of Vines for
Lining Out in Nursery Rows
WRITE FOR PRICES

F. E. Schifferli, - **Fredonia, N. Y.**

"Hathaway's" the Most Extensive, Exclusive Berry Plant Nursery in America

The leading varieties supplied in large quantities, including
Fall Bearers. Currants, Grapes, Gooseberry, Blackberry,
Raspberry and Strawberry. Root Cuttings, Slips, Tips and
Transplants a specialty.

You never delivered finer stock nor received quicker ser-
vice than you get from

Hathaway's Berry Plant Nursery, **Madison, Ohio**

PRINTING

Catalogues
Stationery
Business Forms



The Robinson
Publishing Co.
Hatboro, Pa.

Specialists in Nursery Printing

Ask for Prices. We are the printers of this Magazine



Own-root Field-grown

EXPRESS

WINTER SHIPMENTS

Howard Rose Co., Hemet, Cal.

Peonies

Profitable cut-flower and best general plant-
ing varieties. Very early—early—midseason
—late. Any quantity. Own growing. Im-
mediate shipment. Prices reasonable.

HARMEL PEONY COMPANY,

Berlin

Maryland

THE WESTMINSTER NURSERY

J. E. Stoner, Prop.

WESTMINSTER

MARYLAND

Offers for Fall, 1918:

10,000 Monacacy Apple, 2 yr., Buds.
250,000 Cal. Privets, 2 yr. and 3 yr.
500,000 Asparagus Asst., 2 and 3 yr.
Barberry Thun., 3 yr., extra fine.
Lombardy Poplars, 8 to 16 feet.
Oriental Planes, 8 to 16 feet.
Tulip Poplars, 6 to 12 feet.
Horse Chestnuts, 8 to 12 feet.
Catalpa Speciosa, 8 to 12 feet.
Can supply the above in CAR lots.

We also offer in large lots, Rhubarb, Cumb. Raspberry,
Ruby, Miller, and St. Riggs Raspberry Altheas, 3 to 5 feet,
Deutzias, and Spireas Asst., Hydrangeas P. G. Etc. Will
make low prices for early orders.

FAIRFIELD NURSERIES

FRUIT AND SEED FARMS

OFFER for Fall 1918

GRAPE VINES—One and two years old. Varieties
largely Moore's Early, Concord and Niagara.

Also Scarlet or Crimson Clover Seed and Cow Peas.
Free from weed seeds, all recleaned and guaranteed first
class.

Correspondence solicited. Price list upon request.

CHAS. M. PETERS

P. O. Address, Salisbury, Wicomico County, Md., R. F. D. 3

Long Distance Phone and Telegraph, Salisbury, Md.

EVERBEARING STRAWBERRY PLANTS

If you need Everbearing strawberry plants to fill spring
orders or if you wish to increase your planting in nurseries,
we can supply you with genuine PROGRESSIVE Everbearing
plants, guaranteed to be TRUE TO NAME and handled so as
to reach you in best of growing condition. Write for prices.

We have been growing and breeding the Everbearing straw-
berries for the past eight years and have many new varieties
growing in our experimental grounds that are not yet for sale.
We invite a personal visit to our grounds during fruiting sea-
son, preferably during August or September. The latch string
is always out.

THE GARDNER NURSERY CO., Drawer 103, Osage, Iowa.

GUARANTY NURSERY COMPANY

Granite Building,

ROCHESTER, N. Y.

I am in the market for a general line of all classes of Nursery Stock for shipment this Fall and next Spring. Send me list of what you have to offer with best prices for cash on usual terms. Quality is more important with my company than cheapness.

WALTER F. WEBB, Proprietor.**Wanted Peonies**

Three to five eyes, mixed varieties, in large quantities.

Write letter "H," care "The Nurseryman," quoting best possible CASH prices and state quantities and time of delivery.

BUNTING'S NURSERIES**Offer for Fall 1918 and Spring 1919**

Asparagus roots 1 and 2 yr.; California Privet 1 and 2 yr.

Barberry Thunbergii 2 and 3 yr. heavy on above.

We also have a fair stock of Apple trees 2 yr., Peach trees 1 yr., Concord Grapevines 2 and 3 yr., Spirea Vanhoutte, Hydrangea P. G., Duetzias, Weigelas and Altheas assorted; Philadelphus Grandiflora; Scotch Broom, Buddleia, Wisteria, white and blue; Dorothy Perkins roses 2 yr., Norway and Silver Maples, Catalpa Speciosa; Evergreens, etc.

Write us covering your wants in any of the above stock, prices as low as first class stock and prompt service will justify.

G. E. BUNTING & SONS**SELBYVILLE,****DELAWARE.**

Subscribers to "Nurserymen's Fund for Market Development"

**HARDWOOD CUTTINGS
PRIVET ALL KINDS**

We make a specialty of the above and can give you extra good service. Write us.

OAKLAWN NURSERY,**Huntsville****Ala.****:: Peony Profits ::**

Can be had only if you have the Peonies. The profits are there if you go after them. The demand for both plants and flowers is increasing. Prepare to get your share. Order now and be assured of your supply.

Wild Bros. Nursery Co.**Sarcoie, - Mo.****Rice Brothers Company
GENEVA, - N. Y.**

Before placing your order for Fall, 1918, and Spring, 1919, get our prices on:—

APPLE, PLUM,

PEAR STD. and DWARF,

PEACH, CHERRY,

QUINCE, APRICOT,

ROSES, SHRUBS,

ORNAMENTAL TREES, ETC.

Large assortment of above.

You can save Time and Money

If you use our neatly packed

SHEET NURSERY BURLAP

Put up in bales

In various size sheets ranging in sizes from 24x24 to 40x40 in.

Write for particulars

Sarachan & Rosenthal**64-66 Hanover Street****Rochester, - - New York****Vincennes Nurseries, W. C. REED, Prop****VINCENNES, - - INDIANA**

We are pleased to offer for Fall or Spring:

CHERRY, 2 year X X 1 inch up, also $\frac{3}{4}$, $\frac{5}{8}$ and lighter grades.

CHERRY, One year $1\frac{1}{16}$ up, $\frac{5}{8}$ & $\frac{1}{2}$ to $\frac{5}{8}$

Our Blocks of Cherry are largest to be found in U. S.

We bud annually 500,000 Cherry, they are making splendid growth.

Peach, One Year, all grades leading Varieties.

Plum, Japan and European, One and 2 year.

APPLE, 2 year, a few cars for late fall shipment.

Grafted Hardy Northern Pecans.

Car Lots a specialty, also fair assortment of Ornamentals.

Subscribers to "Nurserymen's Fund for Market Development."

**PECAN TREES****QUALITY
SERVICE****W. L. STEWART
VALDOSTA, - GA.**

Member Southern Nursery Association



T. S. HUBBARD CO.,
Fredonia, N. Y.

Growers of Grape Vines and Small Fruit Plants

For Garden and Vineyard Planting

Established 1866

Send for Catalogue

We solicit correspondence and a list of your wants

FOR FALL 1918—SPRING 1919

CALIFORNIA PRIVET, 2 yr. extra good.

All grades—Special prices on carload lots. Samples if desired.
Oriental Planes and Norway Maples, Pin and Willow Oaks,
Lombardy Poplars.

A select lot of trees in all sizes—transplanted.

APPLES, 3 yr. with 2 yr. heads.

These are good trees, but not as smooth as trees with
1 year heads.

We offer them at a low price. Samples if interested.

1 YEAR APPLE BUDS

All the Standard Varieties in 2-3 ft. and 3-4 ft. grades.

MISCELLANEOUS

A good stock of Flowering Shrubs, Shade Trees, etc., etc.

Baltimore, Md.

404 W. Baltimore St.

Franklin Davis Nurseries, Inc.

JOSEPH DAVIS, General Manager.

Who's got Norway Maples



We have! And we are proud of 'em, too, for they are straight as a string, with good heavy tops, and trunks that will caliper from 1 to 3½ inches.

These Norways have been transplanted several times, therefore the roots are well developed. Frankly we believe they will grade A 1 by any test.

The price? We hesitate to tell you here, but we know you will be satisfied when you see the trees and the invoice. If you want the price before ordering, just drop us a line.

Shipments in car lots without trouble to distant points; around New York City we can send by motor truck.

Swan River Nursery, Patchogue, N.Y.

1857

1918

BRAGG'S COMMON SENSE TREE DIGGER



REPAIRS

Always on hand.

Send for Catalogue

Digger gets All the Roots at the rate of Twenty to Forty Thousand trees per day, and only needs same power as plow.

L. G. BRAGG & CO.

KALAMAZOO, MICH.

Hill's Evergreens

We are headquarters for Everything in the Evergreen line, and with few exceptions have our usual full supply, but some things are scarce and getting scarcer every day. Owing to lack of imports, demand is brisk, and shrewd Nurserymen are covering their requirements early.

Nurserymen—Send us your list of wants in young Evergreens for lining out. Also Deciduous Trees, Shrubs and Vines. Our Propagation Department is one of the largest and most complete in America, and feel sure we can save you money and give complete satisfaction.

Dealers—Let us take care of your wants in Windbreak, Hedge and Ornamental Evergreens. Send in your list for pricing now, while assortment is complete.

Fall 1918 Trade List ready September 1st.



The D. HILL Nursery Co., Inc.

Evergreen Specialists

LARGEST GROWERS IN AMERICA

Box 401

Dundee, Ill.

When writing to Advertisers please mention the National Nurseryman.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSEYSTOCK

The National Nurseryman Publishing Co., Incorporated

Vol. XXVI.

HATBORO, PENNA. OCTOBER, 1918

No. 10

Large-leaved Vines



Porch covered with *Aristolochia macrophylla* (Sipho) Dutchman's Pipe vine and *Osmunda Claytoniana* along the base

IN our last issue we figured the Wistaria and spoke of its value as an ornamental vine. The present subject of illustration is the Dutchman's Pipe or *Aristolochia macrophylla* (sipho), another very strong and robust growing vine, but of entirely different character in habit of growth.

In spite of its luxuriant growth, however, it is very neat in appearance due largely to the arrangement of the

leaves in direct contrast to the bunchy growth of the Wistaria. The illustration shows it completely covering a porch and making a very effective screen. In fact, it encloses the porch so well as almost to make it an inside room.

The ferns at the base of it are the *Osmunda Claytoniana*.

One of the most striking examples the writer

ever saw in the use of this vine was on a large building where the eaves over-hung for at least a distance of four feet. Over the edge of the eaves at the four corners, and in front of the doorway were wire ropes reaching to the ground. Growing up these were vines of the *Aristolochia*. The arrangement of the leaves was so perfect that it gave the appearance of living columns supporting the roof.

This peculiar uniformity of habit in the vine should be kept in mind when planting, to bring out its best values. The general effect of the foliage is extremely rich. The flowers suggest the Dutchman's Pipe as the name implies and are more curious than pretty, so that it is not a vine that one would plant to get a display of bloom. From observation of it south of Washington it is not a plant that seems to like a very sunny or hot and dry exposure. In more northern latitudes we believe it will thrive better in full sun-light, indicating it as a plant better adapted to the northern states than the southern.

It occasionally gets infested with scale, but it does not seem particularly susceptible to it. There is however, one pest that should be watched for, namely a large black caterpillar that is liable to come out at a certain period. This, however, is easily destroyed, and it is only by gross neglect that there is very much damage done.

Other vines with bold foliage that may be classed in the same group are the grape vines. The *Vitis riparia* has the general appearance of an ordinary grape vine, but is worth planting on account of the delicious fragrance of the flowers and the rather good fall coloring. Another grape vine that is extremely desirable is the little known *Vitis Cognetiae*. This plant was originally imported from Japan, but unfortunately there have been spurious types disseminated so that it did not acquire the popularity it deserves. The true *Vitis Cognetiae* has a very large leathery leaf, and is very robust in habit, rich in color, but what makes it most desirable is the wonderful richness of the fall coloring, which earned for it the name of Crimson Glory Vine. To see one of these plants covering a dead tree or where it can ramble in an unrestricted way, when it has the full glory of its autumn coloring, is a sight alone to be remembered.

The well known *Ampelopsis* may be also classed among this group. The Boston Ivy, or *Ampelopsis Veitchi*, is one of the most generally used on account of its clinging qualities and general adaptability to almost any position. It is a vine that may be seen covering walls in the center of large cities, thriving under very adverse conditions.

The *Ampelopsis quinquefolia*, which is readily distinguished from it through having the leaf divided into five parts or leaflets grows much more bushy and should not be used against flat wall surfaces, but rather for the covering of piers, verandas, pergolas, or where a bushy habit of growth is desired. The fall coloring of a *quinquefolia* is usually rather better than the *Veitchi*.

Another variety, *Ampelopsis Englemanni*, is very similar to *quinquefolia*, but is supposed to have better clinging qualities. The difference, however, seems to be botanical rather than anything else, and may be considered interchangeable for planting purposes.

Another vine with heavy foliage that has recently been

planted extensively is the *Dolichos Japonicus* or Kudzu Vine. There is, however, only one quality to recommend this plant, namely its rapidity of growth, which when the plants are old and well-established is really remarkable, the shoots making by measurement over a foot a day. It has, however, little to recommend it from an ornamental or artistic standpoint, as it looks somewhat common and does not start to grow until late in the spring or early summer, and succumbs to the first frost without any special fall coloring effect. The flowers, while rather attractive and fragrant are only produced on old plants and then rather sparingly, and are invariably hidden by the gross foliage.

It thrives best in sunny, dry positions. The first year plants are liable to kill right to the ground, but as the plants get older they form a woody stem, somewhat after the manner of the *Wistaria*, which will resist the frost.

UNITED STATES CIVIL SERVICE COMMISSION

Washington, D. C., August 27, 1918

The Editor,
Sir:—

The Commission again requests the assistance of editors of periodical publications in the campaign to recruit a sufficient number of stenographers and typists to meet the great demand of the Government offices in Washington, D. C. The need for such workers grows more acute daily. Owing to the general demand, the Commission is having difficulty in meeting the requirements of the Government, and it is requested that you assist in the effort by inserting in your publication, free of charge, a notice which shall include all or a suitable part of the announcement contained in the inclosed poster. The Commission will be pleased to have a copy of any issue which contains the announcement.

In the matter of housing in Washington, it may be said that the Room Registration Office of the District Council of Defense, at 1321 New York avenue, has on its lists more than 4,000 rooms which have been carefully inspected and are available for new appointees. The usual charge for rooming accommodations with board, that is, the two principal meals of the day, is \$40.00 a month, but in order to obtain this rate two persons must ordinarily occupy one room. In addition, the Government will soon erect residence halls, including cafeterias, for the accommodation of Government employees in Washington.

The Commission will appreciate your further cooperation in its endeavor to recruit the civil service to meet war needs. It is perhaps unnecessary to say that an efficient civil service is as important as the armed forces in the prosecution of the war.

By direction of the Commission:

Very respectfully,

JOHN A. McILHENNY, *President*.

The Meeting of the Southern Nurserymen's Association

The Southern Nurserymen held their annual meeting at Birmingham, Ala., on August 21st and 22nd. Everything considered, it was a very successful one, and showed an optimistic outlook for the future.

We are publishing on a separate page the President's address and also a paper on fertilizers and war substitutes by William P. Redd, Manager of the Grasselli Chemical Co., that were read at the meeting.

In regard to the labor situation everyone seemed to be of the opinion that there would not be a great deal of trouble in the South.

Mr. William H. Kessler, landscape architect of Birmingham, spoke of the landscape work being done by the government at cantonments and industrial villages.

A very interesting feature of the meeting was an exhibit of apples grown at Auburn, Ala., and which were presented by Prof. G. C. Starcher, State Horticulturist of Alabama. They were a very fine lot of fruit and compared favorably with those shown from what are known as the apple growing districts of the United States, namely Virginia and N. Carolina. Prof. Starcher made some very interesting remarks on fruit growing in the South that were much appreciated.

Mr. C. A. Simpson, of the Simpson Nursery Co., Monticello, Florida, spoke on pecan and citrus growing in Northern Florida.

Rose culture in Mississippi was the subject of a very interesting talk by Mr. S. W. Crowell of the United States Nursery Co., Roseacres, Miss.

Market Development was presented to the Convention by Mr. H. B. Chase, of Chase, Ala., and Mr. J. R. Mayhew, President of the American Association of Nurserymen. Before the session was over every concern represented with the exception of one or two, agreed to support with dollars and cents the market development movement. A good many did not state the amount they would give as the subject had not been thoroughly understood by them before and they needed more time to consider it.

There was some talk of undertaking to get up a fund for using the coming season for publicity purposes in the South, with the understanding that this would merge into the national campaign whenever this was ready to go ahead. A committee was appointed to look into the matter.

H. F. Hillenmyer and Sons, of Lexington, Ky., sent a crate of very fine grapes to the Association which were much appreciated and highly enjoyed.

The committee on time and place of next meeting and nominations recommended as follows:

President: H. B. Caldwell, Atlanta, Ga.

Vice Pres., S. W. Crowell, Roseacres, Miss.

Sec. & Treas., O. Joe Howard, Pomona, N. C.

The Executive Committee to consist of the above and in addition Charles T. Smith, Concorn, Ga., and C. A.

Simpson, Monticello, Fla. At a meeting of the Executive Committee, Charles T. Smith was elected chairman. The next meeting will be held at Atlanta, Ga., in August.

PRESIDENT'S ADDRESS

I FEEL that after what Mr. Harold has said there is very little I can add in extending you a personal and hearty welcome to Birmingham, but I do want you to know how glad I am to have this the annual convention of the Southern Nurserymen's Association in our city today and to have the privilege of showing you what a great and wonderful town Birmingham is. I hope that each of you will enjoy your visit here and when you return to your homes will feel that the meeting has been a pleasant and profitable one for you.

In the coming discussions I hope each member will feel free to get up and say candidly and frankly just what he thinks—for it is in these open discussions that the best information on any subject is brought out and the greatest benefits derived. One of the things that have always appealed to me in our association is the close and friendly feeling existing among its members. Working together surely the members of this Association can accomplish much good for the business. I take the liberty of mentioning several matters which I think worthy of special consideration, at this time, and on which I hope some action will be taken at the proper time if it is deemed best.

MARKET DEVELOPMENT FUND: Joe Howard will tell us at our meeting tomorrow morning what has already been done and what is planned to do in the raising of a fund for National Advertising and the development of the sale of nursery stock on a National scale. There are great opportunities in work of this character which will further the interests of every nurseryman, whether wholesaler or retailer and I think it is proper that we should all do our part in this constructive work whether our subscriptions are large or small. Surely this is a time when we should all exert every ounce of effort we can toward bettering our business and the opportunities have never been better, except for some adverse conditions due to the war. The South has been particularly fortunate in securing many Government industries and large industries fostered by the Government. The development of these industries open up a rich field for the sale of all classes of nursery stock. The Southern farmer also has at last come into his own and is better able than formerly to spare the money to beautify his home grounds and plant orchards both for home use and commercial purposes. The matter of lumping individual subscriptions together to make a fund large enough to carry on National publicity is better than individual effort and ultimately is bound to benefit every nurseryman.

in the United States but it is no time to stand by and "Let George do it." We must all put our shoulders to the wheel and help as much as we can. Any subscriptions that we may make will be money well spent and I trust that those who have not already subscribed will give the matter serious consideration when it comes up.

SUPPORT OF THE AMERICAN ASSOCIATION: We have with us today Mr. J. R. Mayhew, the man who is now at the head of the American Association of Nurserymen and who was largely instrumental in bringing about the re-organization of that body at Detroit three years ago. Under the leadership of men like Mr. Mayhew and Henry Chase the American Association has taken great strides forward since its re-organization and today is much more useful and efficient in looking after the interests of nurserymen than ever before. It is the duty of every nurseryman to obtain membership in the American Association and give it his utmost support. The results already accomplished are nothing compared to what can be accomplished in the future if this support is given by all, and, frankly, friends, the time has come when we simply must bind ourselves together and put our business upon a better basis if we are to meet the new conditions that confront every nurseryman at the present time as regards high cost of production, adverse legislation and lack of interest on the part of the buying public.

Let me urge again upon those who are not already members of the American Association to align themselves with that organization at once and give it their greatest assistance for to do so will surely improve business prospects for us all.

HIGHER ETHICS: The time for sharp practices in the nursery business is past. Those who do not realize it now will do so to their sorrow later on. We must see to it that the purchasers of our goods get value received. It would be worse than useless to undertake the spending of large sums of money upon advertising in an effort to create an interest and demand for our stock unless we go into it with the determination that every buyer shall have plants just as honest and as good as we can make them. The better the results from planting nursery stock the more we can sell. We should not hesitate to charge a good fair price for our stock but we must see to it that the buyer will not have cause to regret the transaction in years to come.

EDUCATIONAL BOOKLET: During our session here we hope to have a free and open discussion of the Educational Booklet edited under the direction of this Association and distributed by its members. Regardless of advertising campaigns carried on in other ways I feel that this booklet has a special mission for the Southern Nurseryman and that it should be continued with improvements from time to time. National Advertising cannot fill local needs. It will create an interest that must be clinched and made tangible. The needs of the Southern Nurserymen are different from those of nurserymen in other sections of the country and it seems to me that a new edition of this booklet, broadened and amplified, will do much good in obtaining business that cannot be obtained in the ordinary way and in stimulating interest that will result in increased sales later. There has long been need of a concise and accurate handbook of infor-

mation on the subject of Orchard and Home Ground Plantings in the South.

EXECUTIVE COMMITTEE: Pardon me for saying it, but under present conditions your Executive Committee does not do you much good. We get our names printed on a few letter heads and about once a year we have the privilege of voting on a new applicant for membership but we are rarely ever called upon for any real service. I feel that this Committee could be used to considerable advantage to the members of this Association if details are worked out. My idea is that with the present topsyturvy conditions there are many problems that come up from time to time with every nurseryman that the Executive Committee or, if you will, a special Committee could give assistance in. A case in point is that last season Shingle-tow was practically unobtainable from the usual sources of supply and many of us spent sleepless nights wondering where we would get our packing material. Could not your Executive Committee, or a special Committee make it their business whenever informed of such shortage to endeavor to locate such material and put the members in touch with the source of supply and could not the same Committee arrange for the contracting of such material as is used in quantity by the members so that it might be secured more cheaply. In the face of rising markets it would seem good business to endeavor to so arrange matters that all staple materials could be secured without liability to the Association, for the members and thus get the advantage of quantity prices.

FERTILIZERS AND WAR SUBSTITUTES

Address by William P. Redd, Manager of the Grasselle Chemical Company, at Southern Nurserymen's Association, Birmingham, Ala., August 21, 1918

Mr. President and Gentlemen:

The available supply of plant foods for agricultural uses during the war, has given the Government serious concern, as the Government knew the extent of our resources in this field and to what extent they would be drawn upon to prosecute this War to a successful conclusion; while, on the other hand, the user of plant foods (or fertilizers) did not begin to realize to what extent these same plant foods would be consumed in the manufacture of explosives.

Of all the plant foods now known to science, there are none given as serious consideration as the three essentials—viz: phosphate, nitrogen and potash, and our soils do not produce, successfully, many things where these three elements are not either present or supplied. It is also a well proven fact that the blending of these foods into one complete mixture before applying, in such proportions as each individual crop requires, is the most intelligent and profitable method of application; therefore, it may be concluded that the curtailment of either of the three essential plant foods is a serious handicap to soil

production. I will, therefore, confine my remarks to the probable available supply of phosphate, nitrogen and potash, during the continuation of this War, taking them in the order that I have named them.

PHOSPHATE

The source from which we derive our phosphates in available, or soluble form, is mainly from acid phosphate, and acid phosphate is made from ground phosphate rock and sulphuric acid, mixed in approximately equal proportions; therefore, to produce a considerable quantity of Acid phosphate, it requires an equal quantity of sulphuric acid—while, on the other hand, sulphuric acid is the basis of all explosives to be manufactured for prosecuting the war.

Up to the beginning of the war, in 1914, it is reliably reported that the fertilizer industry was consuming, annually, about two million tons of sulphuric acid, which would indicate that we were producing, in the United States, about four million tons of acid phosphate, or a tonnage equal to the entire amount of sulphuric acid produced for all purposes.

In 1917, it is reported that our annual production of sulphuric acid had jumped from four million to seven million two hundred thousand tons, while our production of acid phosphate had been reduced from four million to approximately three million tons, showing that, not only have the increase of three million tons been consumed for war purposes, but that five hundred thousand tons of sulphuric acid had been consumed, that would have otherwise gone into phosphate.

The above illustration is made to show the effect of the war upon the fertilizer industry, in reducing the production of one of its most essential plant foods.

I haven't the time to go into the functions of phosphorus in plant growth; we all know of its indispensable value in crop growing. Whether our deductions have been made on the farm, by careful observation, or by scientific study, it is of enough importance and value to be given serious consideration by nations, in the winning or the losing of the war; besides, the demand is here, and what we really want to know about is the supply.

It is extremely doubtful that the manufacturers can produce, or get, the sulphuric acid to make as much phosphate for next season as last. The Government is taxing the manufacturer to the limit of his capacity for acid, while wishing him to make every available ton of fertilizer possible.

The Government knows that fertilizers largely increase the food crops, and that the war cannot be won without food, but there is a limit to the capacity of the sulphuric acid plants; and especially so, since the Spanish ore supply has been cut off.

NITROGEN

While phosphate, as a plant food, may be likened to bread for the human stomach, nitrogen (or ammonia) is the meat.

The Bible tells us that—"Man cannot live by bread alone." Neither can successful crop growing be done without nitrogen.

Nitrogen produces body, foliage, and size, so that a stalk, or a tree, may be capable of bearing wholesome

fruit, and, while its functions are different from phosphorus, it is equally essential, as with meat and bread for the human stomach. Because our crops are gathered and taken from the fields, our old lands have very soon become lean in nitrogen, and, therefore, non-productive.

Barnyard manures are the best nitrogen builders of the soil, because of the nitrogen it contains; besides, it is full of bacteria, so essential to assimilation, but, unfortunately, so small an amount can be produced that it is necessary to turn to other sources for nitrogen.

The soluble or available forms of nitrogen that have been so extensively used by fertilizer manufacturers may be classified under three heads—animal, vegetable and mineral.

Of the animal ammoniates, tankage has furnished the largest part. Next, fish scrap and blood. A new use has been found for tankage within the last few years, which practically eliminates it as a fertilizer ingredient—viz: it is now used as a cattle food.

Blood and fish scrap are produced in such small quantities that but little consideration can be given them as a source of supply.

The vegetable ammoniates have been largely used in the South—viz: cotton seed meal, velvet, soya bean and peanut meal and ground tobacco stems, all of which carry both ammonia and potash in a highly available form. However, all of these products, excepting ground tobacco stems, have been recognized as such a valuable cattle and hog food, that it is feared that within a short time they will also be eliminated as a source of ammonia for fertilizers and that the manufacturer will have to turn to the mineral sources of supply, such as cyanamid (or air nitrogen), nitrate of soda and sulphate of ammonia.

From the 1917 cotton crop, but slightly in excess of two million tons of cotton seed meal were produced, which was marketed around \$49.50 per ton, with freight added. However, the demand for this meal, as a cattle food was so great that but little was obtainable for use in fertilizers; therefore, the production of complete fertilizers was much reduced.

The quantity of meal available this season will depend upon the outcome of the present cotton crop. However, it is not anticipated, at this time, that the quantity will exceed last season.

MINERAL AMMONIATES

As before mentioned, the three available mineral ammoniates are—sulphate of ammonia, cyanamid and nitrate of soda.

Sulphate of ammonia is a by-product from coke ovens, containing about 25% ammonia, in a highly available form, and has been used more extensively in Germany and England than any other ammoniate for years. It is now rapidly coming into use in the United States, but, as it is a most valuable explosive ingredient, the Government has taken it entirely out of the market for use in fertilizers.

Nitrate of soda is, as you know, imported from Chile and practically all importations are consumed as war material.

Cyanamid, (or air nitrogen) has been taken out of the market, by the Government, in that its production has

been discontinued in changing the process to nitric acid.

POTASH

Potash, as a plant food, is one of the important and essentials, however, if our available supply of phosphates and nitrogen was sufficient, we would suffer less from the loss of potash than we would from either of the other two.

The potash in our soils is largely confined to the clay sub-soil, and, by deep plowing and the use of the wood ashes, that we can find we can get along with a much less quantity than formerly used, with equally satisfactory results.

There are certain crops, however, such as potatoes, tomatoes, strawberries, watermelons, and a few others that should be fertilized with a material containing from 3% to 6% potash, to get good yields.

Cotton on low lands should have from 2% to 3% potash to prevent rust and all cotton and corn on sandy lands should be fertilized with a goods carrying not less than 2% potash.

We are all familiar with the fact that we have drawn our potash materials from Germany, up to the beginning of the war, and we also know that the German potash on hand at the beginning of the war has been entirely used up; therefore, it has been necessary to turn to our home production, which has been very much stimulated by the increasing demand.

Plants have been put into operation in Nebraska, Utah and California, producing a very excellent grade of potash from the salt lakes of these states.

In 1916 35,739 short tons were produced, having a mean content of about 27% potash -K-2-0 and a total content of 9,720 short tons of potash K-2-0. This is almost exactly ten times the production quoted for 1915. Practically one-half of this quantity was produced from natural salts, or brines, while about 45% was produced from Kelp, a sea-weed that is gathered on the coast of California. Little of the latter, however, goes into the eastern markets because of the fact that it is needed in California.

While our domestic potash is equally good in plant food value to the German potash, it is more expensive both to the manufacturer and consumer.

When the potash deliveries from Germany were uninterrupted, the manufacturer was enabled to sell potash in mixed fertilizers on a basis of \$1.00 per unit. However, the cost of production of the domestic potash is so much greater that it is necessary to obtain from \$6.00 to \$7.00 per unit, to avoid sustaining a loss.

Much of the present production of potash is maintained by war prices, and cannot continue after these prices fall. Some of the projects may be permanent but, unfortunately, the output is yet small.

SUMMARY:

In summing up the conditions that may be expected to obtain in the fertilizer industry, it can be said with almost certainty that there will be a great scarcity of plant foods, while the war lasts.

There will be a scarcity of phosphate, because of the fact that the consumption of sulphuric acid is now reaching its maximum by the Government.

There will be a scarcity of nitrogen, because of the

fact that the mineral sources, such as sulphate of ammonia, cyanamid and nitrate of soda are being kept off of the market by the Government for use in making explosives.

There will be a scarcity of animal ammoniates for reasons stated in the earlier part of this article.

There will be a scarcity of cotton seed meal to supply ammonia in fertilizers, because of the rapid deterioration of the cotton crop, within the last thirty days and the anticipated demand for that commodity for feeding purposes.

The use of all other materials, such as substitutes for the materials enumerated above is limited to the very small quantities of these materials that are available—viz: such as velvet bean, soya bean and peanut meal substitutes. These materials, also being food products for cattle and hogs, will be offered only in a limited way for fertilizing purposes and the chances are that the price per unit will be so high that they cannot be used in fertilizers.

The fertilizer business is an essential industry and will be encouraged by the Government as much as possible. However, the outlook for the present is not bright, either for the manufacturer or consumer, in getting these materials in the quantities that may be desired, except at a prohibitive price.

THE PLANTSMAN WHO KNEW

A nurseryman looking over a fine collection of evergreens very much surprised the owner by remarking—"that Nordman's Fir is a very fine specimen it evidently did not get a set back when you transplanted it in 1910."

"Why that is so it was planted there in 1910, I remember it because I added that strip of ground to my lawn the spring of that year, but how did you know it?"

"Oh that is simple enough, you see the growth it has made this year, about 10 inches, the year before about the same, the year before that the growth was shorter, indicating a dry summer or some such cause and if you will follow on down you will see the summer of 1910 the tiers of branches come very close together, the leader it made not being more than two inches. It is very evident it was moved at that time as the year previous to that it made a good growth. By going on down you will see the indications of it having been transplanted twice previous to that, once when it was five years old and again when it was eight.

"All the coniferous evergreens carry their histories so they may be read very easily in fact all plants do to a greater or lesser extent, especially while they are young and branched to the ground. When they get older and lose their lower branches it is not so easy to tell their age except by counting the annual rings in a cross section of the trunk.

"Most plants keep a diary of events that affect them which is easily read by the close observer who understands their habits.

While they are young the pages are open and may be read at a glance, as they get older the records are filed away in the archives of the trunk."

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by

THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance\$1.50
Foreign Subscriptions, in advance\$2.00
Six Months\$1.00

Advertising rates will be sent upon application. Advertisements
should reach this office by the 20th of the month previous to the date
of issue.

Payment in advance required for foreign advertisements. Drafts
on New York or postal orders, instead of checks, are requested by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., October 1918

Subscribers to "Nurserymen's Fund for Market Development"

THE END OF THE WAR
The war is such an all pervading thing
however much we would prefer to talk and
write about other subjects it is hopeless to
try and do so. Nothing under heaven mat-
ters until it is won.

That it will be won, there has been no question since
the United States threw her weight on the side of the
Allies but just how long it would take is still open to
debate. Even if we take the military view namely until
the U. S. can exert her full force the end is not in the very
distant future, and there is every possibility for a turn of
events that will bring it to a close much sooner.

Whenever the much to be desired consummation comes
it is due here long before the nurserymen can work up a
stock that will supply the demand that will exist upon
the country returning to peaceful enterprise.

Our goods require from one to eight years or longer to
produce and there are no means of shortening the pro-
cess. It takes two years to grow a two year tree.

Those courageous nurserymen who have gone the
limit in propagation during the last four depressing years
are due to reap their harvest soon.

In an address before a meeting of farmers called by
the Federal Board of Farm Organization at Washington,
D. C., Gifford Pinchot speaking of agriculture said:—

"Is the most honorable and necessary of human industries to
be left out in the reconstruction after the War? The farmers
themselves must decide. If they elect to remain divided into
little separate groups, if they prefer to perpetuate the disor-
ganization and disunion which in the past has brought them
nothing but weakness and neglect, it is within their power and
their right. If they choose to see policies adopted, laws made, and
great decisions imposed upon them by minorities, they have
but to remain weak and divided and these things will be repeated
in abundant measure.

But if weakness and neglect are not good enough for the
farmers of America, if in the new civilization which is dawning
they want power in proportion to their numbers, a fairer share
in the wealth they create, and the just recognition which indis-
pensable services should properly command, then there is work
to be done and to be done now."

Nurserymen will readily see how applicable this is to
their own industry. There is no time to be lost if our
business is to be organized and standardized so that it
can take its place where it belongs. As a fundamental
developer of the resources of the country, to help to
make the world more beautiful and heal the scars on the
souls of men when peace is won.

That reconstruction will come right after the war is
without doubt or cavil and it is entirely up to the nur-
serymen if they will be ignored or pushed aside or if
they themselves will put their industry or profession in
the place where it belongs right up alongside the most
important industries of the country.

Answers to Correspondents



I have read an interesting article in your paper for
September on early fall planting. Am much interested
in this subject as our seasons are very short here. Now
do I understand that this September planting in the east
is a success if stripping the leaves is done? We have felt
that it was necessary to have the wood ripen up well
before stock could be moved although we have seen some
excellent results from early planting the wood slowly
ripening up after planting. Any information will be
highly appreciated. We expect to commence early this
fall and of course are much interested. An early reply
will be highly appreciated.
J. M. W.

Ans.—You will find that early Fall, from September
on until early frost is really one of the best possible sea-
sons for transplanting deciduous trees and shrubs.

The late Edward Meehan, who perhaps had as long
and as varied an experience in planting as any man in
the United States, stated he considered it the very best
season of the year.

As all planters know, success does not depend so much
upon the actual season as upon the conditions that exist
at the time of the operation. If the weather is very dry in
early September, as is sometimes the case, it is perhaps
not advisable to attempt to dig and plant, unless water is
available, but if the ground conditions are at all moist
there is practically no danger, and by planting in Sep-

tember you practically gain a year's growth in comparison with leaving it until the following spring.

The ground is warm and the plants make root and become firmly anchored before the cold weather starts in, which insures their being able to get an early start in the spring and take full advantage of the spring growing season.

In hot, dry and windy weather, of course, it is not advisable to leave roots exposed any longer than possible, but where the plants can be dug, the leaves stripped from them, planted and watered if the ground is very dry, there is practically no danger of failure.

In planting trees in fall, especially later on in the season, one of the main causes of failure is due to the fact that the trees do not become anchored or rooted enough to stand the winter conditions. The blowing and shifting of the wind, together with alternate freezing and thawing is very detrimental. If proper precautions are taken to firmly anchor the trees so that they will not move in the wind, oaks and other trees that are considered rather difficult to move in the fall, can be safely handled.

One of the best transplantings of oaks the writer ever saw was one that was done late in the fall, but the ground was piled up around the stems fully two feet and left there over winter, being removed in early spring.

Not one of the trees failed, yet the position was very much exposed and conditions were rather against them.

It is usually considered advisable not to dig trees in the fall until the wood is ripe and of course, this is a good rule, but some plants practically never do ripen. They continue growing until frost actually nips them back. In the case of this type of tree or bush it is well to prune back the tops a little to firm wood, so the ends will not wilt down.

There is on question but that it would be a great advantage to the nursery business if nurserymen as a body urged early fall planting as it would give a much longer season, and when properly done, very good results.

A SOUTHERN BOOKLET NEEDED

The President of the Southern Nurserymen's Association in his address before the annual meeting called attention to the need of a Southern Edition of the Nurseryman's Booklet.

This is very evident to everyone who is at all familiar with conditions in the South. Due to climate and a very different flora from that of the northern States the seasons are different for planting, and the nursery stock used varies greatly.

While the fundamentals of landscape gardening are the same the world over, nothing looks quite so unsatisfying as attempts at northern gardening in the sunny South.

Headquarters 2nd Battalion,

315th Field Artillery,

A. E. F. France, 21st August, 1918.

TO THE MEMBERS OF THE AMERICAN ASSOCIATION OF NURSERYMEN

My Dear Friends:—

I have just received a letter written by your committee, in which it said some very complimentary things regarding your retiring President and friend.

I cannot tell you how much I appreciate your thoughtfulness, your friendship and good will.

It was a great pleasure to send you my brief "message," and although short, it was most sincere. I deeply regret that I could not be present with you at the Chicago Meeting.

Since landing here last spring I have had some very unusual experiences. Recently I had a little fun flying with the British, was fired upon by "Big Bertha" and the train I was on was bombed by a Boche aeroplane. Luckily he was driven off before he registered a hit, so I am still here.

All our men have been doing marvelously well over here, even better than the papers report. Both the British and French are delighted with the way our men fight, and the nerve and ability of our officers.

The war may last a long time before the Germans are beaten but there is absolutely no doubt about the ultimate outcome. America will go down in history not only as the "Cradle of Liberty" but the "Savior of Liberty."

The first battle of Chateau Thierry will go hand in hand with the "Battle of Lexington" in our school books.

We are terribly busy here now and it is almost impossible to write letters. Also the censor will not let us write much. When I get back home, which I hope to do, I will have some very interesting tales to tell and if I don't get through just think of me sometimes when you are gathered around the big round tables.

In the meantime even though I cannot write many letters, I shall be glad indeed to hear from all my old friends in the Association, whenever you can find time to write. When I say friends, I mean all of you, for if I have an enemy who is a member of the Association, I do not know it.

Again assuring the members of the Association of my appreciation for all you have done for me, and with kindest regards and best wishes, I am

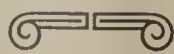
Most sincerely,

Your friend,

LLOYD C. STARK,

Major 315th Field Artillery,
American Expeditionary Forces.

Fourth Liberty Loan



*"And for the support of this Declaration with a firm
reliance on the protection of Divine Providence, we
mutually pledge to each other our lives, our fortunes and
our sacred honor."*

JOHN HANCOCK,
Signer of the
Declaration of Independence.

He Signed for Us

*The boys "over there" are keeping their pledge.
The liberty loans call for us to keep ours.*

The Apple as an Essential Food

The following republished from the Fruit World cannot be too widely known.

That the supply of fruit—and especially Apples—will be a deciding factor in the war is a statement authoritatively made by an eminent British physician, Dr. Josiah Oldfield, Senior Medical Officer to the Lady Margaret's' Fruitarian Hospital of England, in his essay on "Fruit and Its Effect on the War" says:—

"In the early weeks of the war I gave an interview to one of the London dailies, and ventured to prophesy that the end of the contest would be influenced largely by dietary problems, and in these problems I did not consider that the question of protein and scale calorific values for muscular substance would be of so much importance as those of foods which supply nerve nutrition, i. e., fats and salines. It is very difficult to deprive any besieged country—or even any besieged city—of all sources of muscular nourishment so long as any other cellulose remains to be transformed by chemical agencies into a more digestible form of carbohydrate. The difficulty for Germany as a beleaguered country was therefore not really either meat, or cereals, or potatoes, but fats and fruits and salads. The joining up of Turkey threw my prophecy out of gear as to time, because it opened up the great stores of oil and figs and other fruits of Asia Minor. This source is slowly failing, and to-day, in spite of a complete calorific dietary, the people of Germany are beginning to develop the disease of mal nerve nutrition. There are beginning in Germany already grave manifestations of the basic origin of many diseases. The latest is a widespread œdema in the legs and feet and face, of which particulars are given in a late issue of 'The Lancet.' This will steadily get worse and worse as another winter comes on unless fresh fruit, and salads and seed oils, can be introduced largely into Germany. I have dealt at length with Germany and her fate, to emphasize the great importance of avoiding a similar catastrophe for England. English stamina, courage, endurance and heart for the war depend on complete nerve nutrition. Now for this the calorific values of wheat, or beans, or beef, affords no criterion. The danger is that laboratory scientists will measure the comparative importance of cargoes by calorific values, and will on this ground tend to debar juicy fruits as being very light cargo compared with legumes or cereals. Every effort should be exercised to prevent this, or else, when the mischief is done, there will be a panic importation of anti-scorbutic fruits. I note that a small number of ships are still allowed to run to the West Indies

for Bananas, and this is excellent, but weight for weight and bulk for bulk, the most important fruit to be imported during the winter and early spring of 1918 is Apples. Were I food controller in Germany and allowed the choice of free import of one article of food from November to April, I should select the Apple. So, in England, while for importation purposes legumes and peanuts are the most concentrated form of proteid; rice and wheat and maize, the most important of the cereals; olive oil, sesame oil, peanut oil and almond oil, the finest forms of fat; Apples, Lemons, Oranges (and onions) are immeasurably the most important of fruits, which are nerve foods, and without the presence of whose salts physiological functions fail. It will be a grave risk to England's home stamina if her supply of Apples is cut off, because during winter conditions in this climate they are superior to either Lemons or Oranges, and cannot be replaced by any other fruit."

COST OF PRODUCING APPLES IN YAKIMA VALLEY, WASHINGTON

Bulletin 614 U. S. D. of A., 1918 reports a detailed study in 1915 of the current cost factors involved in the maintenance of orchards and the handling of the crop on 120 representative bearing orchards in Yakima Valley.

The total annual acre cost of producing apples for the 120 farms studied was \$345.68, or 80.02 cts. per box, figured on an average yield of 432 boxes per acre. The net labor cost was 34.49 cts. per box, or 43.11 per cent of the total net cost. Of the labor cost 17.71 per cent of the total cost was charged to maintenance and 25.4 per cent to handling. Material and fixed costs were 43.53 cts. per box, or 56.89 per cent of the total net cost. The greatest item of fixed cost was the interest on investment, which made up 43.91 per cent of the cost other than labor and 24.98 per cent of the total net annual cost. The increased labor cost in cultivated orchards was offset by lower yields from orchards under the mulch-crop system, hence the total cost of production was essentially the same for both classes of orchards. Only orchards of bearing age, 7 years or older, were considered in this investigation, their average age being 12.6 years.

Of the principal commercial varieties now grown, Winesap, Jonathan, and Ben Davis make up about 43 per cent of the total acreage. Other important varieties grown are Esopus, Missouri, Yellow Newtown, Rome, Beauty, Gano, Arkansas, and Stayman Winesap.

THE BARBERRY AND THE WHEAT RUST

By Willard N. Clute

WITHIN the past few months, a vigorous campaign has been waged against the common barberry (*Berberis vulgaris*) on the ground that it harbors a very destructive rust of cereal crops. A few States, indeed, have passed laws for its extermination within their boundaries, and a large number of recent graduates from our agricultural colleges have found an outlet for their patriotism, an opportunity to make a reputation, and more or less remuneration in endeavoring to exterminate the barberry, root and branch.

The common barberry is not an especially beautiful shrub and can well be spared from our future plantings, but there are a large number of parks, cemeteries and private grounds whose beauty depends to some extent upon plantings of this shrub made before war was declared upon it, and it behooves us to look carefully into the charges against it before getting hysterical over the matter and pulling them up. If such plantings threaten the health of the wheat, they should, of course, be exterminated forthwith; but if they do not, a reasonable time should be given the owners in which to replace the shrubs with something else. In any case, since the shrub is a possible source of danger, it should ultimately be removed, or at least reduced somewhat in numbers.

The wheat rust, which the barberry is accused of harboring, belongs to a group of fungi usually known as Basidiomycetes, or sometimes as Accidiomycetes. There are possibly ten thousand rusts, all parasitic upon various species of green plants and in many cases confined to a single species of host plant. One of the most important and interesting facts about them is that a large number require more than one species of plant for the completion of their life cycle. Thus the rust of apple passes part of its existence on the cedar, the corn rust begins life on the oxalis and the wheat rust has one of its stages on the barberry. Some of these rusts have no less than five different kinds of spores, each in its proper place in the life cycle and each carrying the rust to new areas of infection, all of which shows how powerful for harm some of the species are.

The botanist knows the wheat rust as *Puccinia graminis*. Under this name, however, are included at least half a dozen forms, some of which affect wheat, while others injure rye, oats, barley and various wild grasses. It is likely that all may live on the barberry, but unless they happen to be of the right form, they cannot harm the wheat though they may attack other cereals if they be in the vicinity. The rust is especially fond of *Agropyron repens*, the well-known quick-grass or quack-grass. One might be willing to donate a bushel of wheat now and

then, if the rust would only run this pestiferous species out of existence.

Under favorable conditions, the wheat rust begins its life cycle in spring on the leaves of the barberry. Here the fruiting parts form thickened cushion-like growths from one to several times the diameter of a pinhead. Spores from these bodies are blown by the wind to wheat plants in the vicinity and there set up an infection which later manifests itself in rusty patches on the leaves and stems, and greatly reduces their vigor. From the plants on the wheat new spores are given off to set up new infections, and so spread the mischief. Along toward the end of the season, two-celled, dark-colored spores are produced, and these survive the winter and in spring set up the infection on the barberry again. From the foregoing it would seem that all that is required to forever remove the danger from rust is to remove the barberry, thus breaking its life cycle, but the rust is not so helpless as all that. If no barberry is at hand the rust merely omits that part of its life cycle and sets up its infection directly upon the wheat. In India and Australia, where the barberry does not grow, the wheat rust is well known. Removing the barberry, then, is only one step in the effort to curb the pest. A second interesting fact is that the further South one goes the less is the barberry concerned in spreading the wheat rust. In warm regions the summer spores survive the winter and propagate the rust, and the autumn form or black rust, if it occurs, does not seem to affect the barberry. In cooler regions the barberry is often heavily rusted in spring, though there may be extensive areas where it is not affected. The connection of the barberry and the wheat rust has been suspected for a very long time. Laws were frequently made against the shrub, but it has continued to hold its own. A half century ago, the State of Massachusetts ordered its extermination.

From the facts here presented, it is very apparent that while the barberry is not the only method by which wheat rust is spread, it may on occasion contribute to this end and should be rooted out, especially in the vicinity of wheat fields and other cereal crops. In cities and towns, far removed from grain fields, it is probably not a very great menace, but since it is not especially ornamental it should be replaced as soon as possible by less dangerous and more decorative shrubs. Spiraeas, hydrangeas, golden bell, snowball, ninebark, mock orange, rose-of-sharon, lilacs and an immense number of other floriferous shrubs will grow wherever barberry will, and are far superior to it. Lastly, the Japanese barberry, so extensively planted for hedges, is not affected by the rust and need not be disturbed.—*American Botanist*.

August 26, 1918.

The National Nurseryman,
Hatboro, Pa.

Kind Editor:—

Enclosed please find check for \$1.50 for which extend my subscription one year to the National Nurseryman. It is a fine trade journal and much useful information is given through its pages.

Yours truly,

W. A. ELLINGER,
Lancaster, Ohio, R. R. No. 2.

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STATE AND DISTRICT ASSOCIATIONS

American Nurserymen's Protective Association—President, Irving Rouse, Rochester, N. Y.; secretary, Thomas B. Meehan, Dresher, Pa. Meets annually in June.
American Retail Nurserymen's Protective Association—President, H. W. Marshall, Arlington, Nebraska; secretary, Guy A. Bryant, Princeton, Ill. Meets annually in June.
Association Oklahoma Nurserymen—President, P. W. Vaught, Holdenville, Okla.; secretary, Jim Parker, Tecumseh, Okla. Next meeting during week of State Fair at Oklahoma City, last of September or first of October.
California Association of Nurserymen—President, John S. Armstrong, Ontario. Secretary, H. W. Kruckeberg, Los Angeles, Cal.
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Idaho Nurserymen's Association—President, Anton Diedricksen, Payette, Idaho; secretary, J. F. Litooy, Boise, Idaho. No definite time has been set for next meeting. Probably in July at Boise, Idaho.
Illinois Nurserymen's Association—President, Guy A. Bryant, Princeton, Ill. Secretary, A. M. Augustine, Normal, Ill.
Massachusetts Nurserymen's Association—President, John Kirkegaard. Secretary, Winthrop H. Thurlow, West Newbury, Mass.
Mississippi Nurserymen's Association—President, Theodore Bechtel, Ocean Springs, Mississippi; Vice-President, S. W. Crowell, Roseacres, Mississippi; Sec'y-Treas., R. W. Harned, Agr. College.
National Association of Retail Nurserymen—President, E. S. Osborne, Rochester, N. Y.; secretary, F. E. Grover, Rochester, N. Y.
New England Nurserymen's Association—President, Harlan P. Kelsey, Salem, Mass.; Secretary, Charles Adams, Springfield, Mass. Annual meeting held on the last Tuesday in February.
New Jersey Association of Nurserymen—President, Carl H. Flemer, Springfield, N. J. Secretary-Treas., A. F. Meisky, Elizabeth, N. J.
New York State Nurserymen's Association—President, E. S. Osborne, Rochester, N. Y.; secretary, H. B. Phillips, Rochester, New York. Next meeting September. Probably at Utica.
Ohio Nurserymen's Association—President, T. J. Dinsmore, Troy, Ohio; secretary, W. B. Cole, Painesville, Ohio.
Oregon—Washington Association of Nurserymen—President, C. F. Brellhaup, Richland, Wash.; secretary, C. A. Tonneson, Tacoma, Wash.
Pacific Coast Association of Nurserymen—President S. C. Miller, Milton, Oregon; secretary-treasurer, C. A. Tonneson, Tacoma, Wash. Place of next meeting to be decided later.
Pennsylvania Nurserymen's Association—President, Adolf Muller, Norristown, Pa. Secretary, Henry T. Moon, Morrisville, Pa.
Southern Nurserymen's Association—President, O. W. Fraser, Birmingham, Ala.; Vice-president, H. C. Caldwell, Atlanta, Ga.; Secretary and Treasurer, O. Joe Howard, Pomona, N. C. The next meeting is to be held in Birmingham the 21st and 22nd of August.
South Western Nurseryman's Association—President, W. C. Griffing, Port Arthur, Texas. Secretary-Treasurer, L. J. Tackett, Fort Worth, Texas. The next meeting will be held in Denison, Texas, September 24th, 1918.
Tennessee Nurserymen's Association—President, George W. Poague,

Graysville, Tenn. Secretary-treasurer, G. M. Bentley, Knoxville, Tenn.

Tennessee State Florists' Association—President, Leon Geny, Nashville, Tenn. Secretary-treasurer, G. M. Bentley, Knoxville, Tenn.

Texas Nurserymen's Association—President, William B. Munson, Denison, Texas; secretary-treasurer, J. M. Ramsey, Austin, Texas.

Western Association of Nurserymen—President, Lloyd C. Stark, Louisiana, Mo.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

THE FIRST MILEPOST

The government has laid its hands upon the rails of the country; swiftly, silently, the vast administrative machinery of the second largest industry of the United States is changing its form; the tasks, the salaries, the very lives of hundreds of thousands of railroad men are being seriously affected; questions without number rise to the lips of every observer, questions, many of which no one can now answer, so novel and unprecedented is the situation which the war emergency has called into being.

Miracle—or catastrophe? Success—or failure? The great enigma! The railroads in their historic, peacetime structure were found inadequate as an industrial weapon of war. Came the government fiat. Two million railroad employees were affected. A historic evolution was interrupted; "thou shalt not" over night became "thou shalt;" laws higher than those on the statute books were invoked—and the impossible was done.

Done it was, too, with hearty good will. It is a war measure. The fighting spirit of the American people has furnished the magic power for carrying it out. Now have they to wonder at and examine what they have done.

As for the future, that must be allowed to take care of itself. Who can tell what the American people will want to do with the railroads when it is no longer a question of making every sacrifice in order to win the war?

Just now we will do well to cultivate President Wilson's philosophy of the open mind. Today the war's the thing.—*Richard H. Waterman in The Nation's Business for August.*

A GYRATING TREE

A cross section of a spruce tree, recently received from Alaska, shows a most peculiar spiral structure which has caused a great deal of speculation among the various foresters throughout the country. Although no definite explanation has been offered, a theory has been advanced in regard to its history which is extremely interesting. It is known that a coniferous tree, growing at a slant, forms, on the lower side of the trunk, a dense reddish wood known as rotholz red wood. As the rotholz in this particular specimen is a continuous formation, winding from the centre to within half an inch from the circumference, it is surmised that it was growing in an inclined position on the edge of a glacier, where it was caused to rotate so that different radii of the stem were successively on the downward side, thus causing the rotholz to intersect the annual rings and, as the tree grew older, forming a spiral. The formation of the rotholz apparently began when the tree was six years old, the rotholz

as well as the tree itself making almost five complete revolutions, requiring from eight to nineteen years for each revolution. The tree was eighty-three years old, as determined by counting the annual rings, and the formation of the rotholz ceased about twenty-one years before the tree was cut, which means that the tree must then have assumed a vertical position. We like to believe that this tree foresaw the great world war and, with the aid of a glacier, it began the peculiar gyrations which proved its fitness for airplane stock. Ten revolutions in ten seconds, with head bent to the knees, at the end of which time he must resume an upright position, is one of the tests given an aviator, but even he will admit that five revolutions in a lifetime is doing well for a tree.

BROAD-LEAVED EVERGREENS AT THE ARNOLD ARBORETUM

The number of varieties of these plants which can be successfully grown in eastern Massachusetts is very small, and the botanical explorations of the last quarter of a century have made only a few additions to the list. Moreover, it is not probable that further exploration will greatly increase the number of these plants which can be grown in this climate, and probably the only hope of increasing it is in the production of new races of hardy Rhododendrons. A large portion of the broad-leaved evergreens which are hardy in the northern states belong to the Heath Family and cannot grow in soil impregnated with lime, so that the number of these plants available for the gardens of the middle west is confined to species of only three or four genera. Of the plants introduced from China only one or two Rhododendrons, four Barberries, a Viburnum, and possibly a Gaultheria can be kept alive here in the open ground, and the permanent value of some of them is not yet assured.

EVERGREEN BARBERRIES. The four species of evergreen Barberries which are growing in the Arboretum are *Berberis Julianae*, *B. verruculosa*, *B. Gagnepainii*, *B. Sargentiana*. The last is the least hardy of these four plants and it can be kept alive here only in exceptionally sheltered positions, and, judging by our experience with it in the Arboretum, it will never become a good garden plant in this climate. Of *B. Julianae* there are a number of plants here in exposed positions where they have been growing for several years and have not suffered from heat or cold. It is a tall shrub with pale branches and spines, thick, dark green leaves, clusters of yellow flowers and blue-black fruit. The Arboretum plants flowered for the first time last spring and have not yet produced fruit. *B. Gagnepainii* is also a tall shrub, with yellow-gray branchlets, long slender spines and narrow spiny leaves. The small flowers are in from three- to eight-flowered clusters and are followed by pear-shaped, bluish black fruit one-third of an inch long. This Barberry has flowered and fruited in the Arboretum this year for the first time. *B. verruculosa* is a dwarf spreading plant sometimes three feet high and broad, with slender, semi-pendent branches covered with many long slender spines and small, remotely spiny, toothed leaves dark green and very lustrous on the upper surface and silvery white be-

low. The flowers are pale yellow and solitary or in pairs, and the fruit is about half an inch long and dark violet color or nearly black. This handsome little plant flowers irregularly through the summer and early autumn and has not yet ripened its fruit in the Arboretum. These three Chinese evergreen Barberries are with the other Chinese plants on the southern slope of Bussey Hill where they have been growing for three or four years in an exposed position.

MANONIAS, as Barberries with pinnate leaves are now generally called, are not very hardy here with the exception of the Rocky Mountain *M. repens* which is a good plant in this climate and soon spreads by underground stems into broad clusters. The handsomer *M. Aquifolium*, the Oregon Grape of the northwestern part of the country, lives in sheltered positions, but many of the leaves are usually injured by the cold. *M. pinnata* and *M. japonica* generally live here but cannot be recommended for general planting. They can be seen on Hickory Path near Centre Street.

VIBURNUM RHYTIDOPHYLLUM. This plant attracted a good deal of attention when it was first raised from seeds collected by Wilson in China, but in eastern Massachusetts it is hardy only in sheltered positions and usually suffers more or less every winter. In the neighborhood of Philadelphia, however, it appears to be perfectly hardy and specimens there are already fully ten feet high. It is a large shrub with stout erect branches and tomentose branchlets, and large dark brown leaves lustrous and deeply wrinkled on the upper surface, and covered below with a thick coat of gray or yellowish felt. The flowers are in compact terminal clusters which are formed in the autumn and are conspicuous during the winter, and the fruit is about a third of an inch long, at first bright red when fully grown and finally black and very lustrous.

KALMIAS. The most generally satisfactory broad-leaved evergreen which can be grown in this part of the country is the Mountain Laurel (*Kalmia latifolia*) which is one of the handsomest plants of the North American flora. There are forms of the Mountain Laurel with white, pink and red flowers and there are some monstrous forms which are more curious than beautiful. Two dwarf species, *Kalmia angustifolia*, the well-known Sheep Laurel of northern pastures, and *K. carolina* from the southern mountains, although not often cultivated, deserve a place in the garden. *K. polifolia*, or *glauca*, is hardy, but not easy to establish in gardens. The Kalmias, like the Rhododendrons and all plants of the Heath Family, cannot grow where there is lime in the soil.

RHODODENDRONS. A large number of the species and hybrids of Rhododendrons are now cultivated in California and in some parts of Europe, but only a few of them can be grown in the open ground in the eastern United States, and the region here where any of these plants thrive is not large, for it is too cold for Rhododendrons north of Massachusetts and too hot for them south of Pennsylvania except on the slopes of the Appalachian Mountains. Only the species of eastern North America, *R. maximum*, *R. catawbiense*, *R. carolinianum* and *R. minus*, and *R. Swirnowii* of the Caucasus, *R. brachycarpum* of the high mountains of Japan, and *R. micranthum* from western and north central China are perfectly hardy

here. This last is a small plant with small leaves and small compact clusters of white flowers and looks more like a *Ledum* than a *Rhododendron*. Of the sixty odd species of Chinese *Rhododendrons* raised at the Arboretum from seed collected by Wilson this is the only one that is perfectly hardy here, although *R. discolor* can be kept alive in sheltered positions at least for a few years. Two little European *Rhododendrons*, *R. ferrugineum* and *R. hirsutum* live here but the plants are generally short-lived and not really satisfactory. Most of the *Rhododendrons* cultivated in this part of the country are hybrids of *R. catawbiense*, but only a very few of the great number of these hybrids which have been raised in Europe are really hardy here. There are hybrids, too, growing in the Arboretum of *R. Metternichii*, of *R. Smirnowii*, of *R. maximum*, of *R. minus* and of the European species which are hardy. There is still much to be accomplished in the gardens of eastern America by the breeders of hardy *Rhododendrons*.

HOLLIES. *Ilex opaca*, the widely distributed, red-fruited species of eastern North America is the only broad-leaved evergreen which is a tree in this climate. *Ilex opaca* seems able to flourish under the conditions of city life and to be little injured by the smoke from bituminous coal fires which are so injurious to most evergreen plants. That it is a long-lived tree is shown by the specimens planted by Washington about 1785 at Mt. Vernon which are still in perfect health and among the most interesting of the trees planted by him. *Ilex glabra* is another excellent broad-leaved evergreen for the decoration of New England gardens. It is a broad round-topped shrub with small lustrous leaves and small black fruit a good deal hidden by the foliage, and is a native of the coast region from New Hampshire to Texas. A good mass of these shrubs can be seen on the right hand side of the Hemlock Hill Drive opposite the Laurel plantation. Two Japanese evergreen Hollies can be grown here, *Ilex crenata* and *I. pedunculosa*. The former is a small bushy tree or small shrub with small finely toothed leaves and small black fruit borne on such small stems that it is hidden by the leaves. There are forms of this plant with larger and with smaller leaves, and the small-leaved form (var. *microphylla*), on which the leaves are not more than half an inch long, is the hardier. Several large plants can be seen on Azalea Path. Of *Ilex pedunculosa* there are only small specimens in the Arboretum, where they can be seen on Hickory Path near Centre Street where they have been growing for several years. In Japan this is a small tree sometimes twenty or thirty feet tall, or more often a shrub. The leaves resemble in shape those of our Wild Cherry, and the handsome red fruit is borne on long stalks and is very ornamental.

ANDROMEDAS. *Andromeda*, or as it is often called *Pieris floribunda*, is one of the handsomest of the broad-

leaved evergreen shrubs which are perfectly hardy in this climate. It is a round-topped shrub occasionally eight or ten feet across and four or five feet high, with small, pointed, dark green leaves, and short terminal clusters of white bell-shaped flowers. The flower-buds, which are fully grown in the autumn, are conspicuous and ornamental during the winter. This southern Appalachian shrub is an old inhabitant of gardens and is still much propagated by nurserymen. The related Japanese species, *Andromeda japonica*, is sometimes a small tree and has more lustrous leaves and larger flowers in larger clusters. The plant is hardy, but the flowers, which open early, are often injured by spring frosts. The so-called Bog Rosemarys, *Andromeda polifolia* and *A. glaucophylla*, although naturally swamp plants, can be grown in dry soil and are attractive small shrubs with small pale leaves and clustered white or pink flowers.

CHAMAEDAPHNE CALYCVLATA. This, the so-called Leather Leaf, is another native small plant which can be successfully grown in dry ground. The small white flowers are in the axils of the upper leaves and are not very conspicuous, and as an ornamental plant the Leather Leaf is not as attractive as several of the smaller shrubs of the Heath Family. There is also a plant of the dwarf form in the Shrub Collection (var. *minor*).

THE BOX HUCKLEBERRY. Among the easily grown and perfectly hardy evergreen plants of the Heath Family none is perhaps more beautiful than the Box Huckleberry (*Gaylussacia brachycera*) with its small, lustrous leaves which become the color of old Spanish leather in the autumn, small white flowers and blue fruits. The prostrate stems spread into broad mats only a few inches high, and although the plant grows naturally in the shade of Oak woods it thrives in full sunshine. This is one of the rarest plants in North America and is now known to grow naturally in only one place in Pennsylvania.

BLUEBERRIES. A few of the evergreen *Vacciniums* can be grown in this climate, including the Cowberry (*V. Vitis-Idaea*) and its variety *minus*, low plants with tufted creeping stems, small pink or white flowers and dark red berries. The two Cranberries, *Vaccinium Oxycoccus* and *V. macrocarpon*, although inhabitants of swamps, will also grow in dry ground and are beautiful plants.

The only other broad-leaved evergreens which are perfectly hardy here are the *Leucothoes*, the *Bear Berry*, the *Gaultherias*, the *Ledums*, *Leiophyllums*, the *Paehystimas*, *Evoñymus radicans* and *Vinea minor*.

Mr. Curtis N. Smith, attorney for the American Association of Nurserymen, reports that the objectionable nursery stock bill recently filed in the Georgia legislature has been defeated. This bill established the measure of damage when fruit trees proved untrue to name.

PRICES OF NURSERY STOCK

One of the most difficult things for the nurseryman to do at the present time is to adjust the prices of his stock to meet the immediate present conditions.

With prices of everything that enters into the cost of production and doing business going up, up and up on the one hand, and the restricted or at least uncertain demand on the other, it is quite a problem to know just what to do.

The situation proves again what everyone knows, yet few act upon, and that is, cost of production, plus overhead, should be the basis of all prices.

While admitting the difficulty of determining costs in many establishments, analysis of any nursery price list will reveal the fact that prices are based on selling possibilities, rather than cost probabilities.

Recent estimates for supplying a quantity of nursery stock, brought bids ranging from \$1700 to \$20,000 on specifications that were very detailed. While admitting a sad lack of standard which would allow for considerable variation according to the way in which the stock had been grown, such a wide difference holds the trade up to ridicule and demoralizes prices.

Such a condition could not occur if the standards and grades were more definitely fixed and the public educated to recognize them, so they would know if they were buying firsts, seconds or culls, plus service which would cover efficient handling to get the stock to the purchaser in good condition.

As it seems important for each individual nurseryman to arrive at cost of production, it would not be a difficult matter to find an average cost, especially if he grouped his plants according to the difficulty of propagation and raising. If this were done it would also do away with much individual pricing.

There is no need for a plant to vary but a few cents in the selling price if the cost of production is the same.

Take the shrubs for instance. They are readily grouped according to the time it takes to raise a specified grade. Those such as the *Cornus siberica*, *Hibiscus*, *Deutzia*, *Forsythia*, raised from hard wood cuttings, are such as make a 3 to 4 ft. shrub in two years with one transplanting. 2. Those that are raised from soft wood cuttings. 3. Those that have to be layered. 4. Those that have to be grafted or budded and those raised from seed. The only variation necessary would be for novelties or rare kinds difficult to propagate by any method.

Evergreens may be grouped in the same way. Fast growers from seed and slow growers from seed, so many times transplanted at so much per foot. The same may be said of those raised from cuttings or grafted. This leaves only the rare and specialties for individual prices.

Trees also lend themselves to the same grouping.

Fast growers or soft wooded trees such as the Poplars medium hard wooded, such as the Norway Maple and

Button ball, and the hard wooded and slow growers like the Oak and Beech, at so much per inch caliper at a fixed height from the ground.

There will always be rare kinds, novelties, specially grown specimens, etc., for which the nurseryman may fix his own price, but the staples should have a fixed standard of quality and size to protect the nurseryman from the adventitious grower.

Prof. L. H. Bailey, writing in *Science*, calls attention to the fact that there is no place in our botanical registers for cultivated plants. It is possible that nurserymen, or those who compile the catalogues have found a difficulty in placing in the proper position some of the garden races of plants.

A good illustration of this is the Meehan's Mallow Marvel, which is a hybrid between *Hibiscus coccinea*, X *militarius*, X *moschutos*, in other words these plants are the progeny of the three distinct species, and form a race of garden plants that have no botanical classification.

In listing botanically it is difficult to know just where to put them. The same might be said of the Paeonies, Phloxes, Irises, Roses and numerous other groups that have been so cultivated and improved so as to have lost their botanical individuality. It is true some of the catalogues attempt to group them as in the roses, under the H. P. or H. T., and other families, but this is usually a makeshift arrangement at the best.

There is work here for some genius to compile a list of cultivated plants, much in the same way that Asa Gray classified the indigenous plants of America.

SHORT FRUIT CROP IN ENGLAND

According to the *Gardeners' Chronicle*, London, the present year is proving itself to be one of the poorest fruit harvests on record. There is a very great shortage and not enough to use up meagre rations of sugar for preserving. This of course, means greater demand for American grown apples and other fruits, as the apple especially is becoming one of the recognized essential food products.

AMERICAN CEMETERY SUPERINTENDENTS

The 32nd Annual Convention of the American Cemetery Superintendents was held at the Powers Hotel, Rochester, N. Y., September 11 to 13. The following officers were elected to serve for the ensuing year:—President, W. H. Atkinson, Trenton, N. J.; Vice-President, Henry Adams, Boston, Mass.; Secretary-Treasurer, W. B. Jones, Pittsburgh, Pa.

The Convention for 1919 will be held in Cincinnati, O.

OUR MISTAKE

In our September issue we had a news note to the effect that James W. Fraser, Huntsville, Ala., had been presented with a little baby girl.

It seems our reporter was all wrong. Instead of a "peach bud" we should have said a future president.

Somehow, we feel that we don't have to apologize, as it is even better than first reported, and from all accounts "Jim" is mighty proud of his fine little boy.

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Synopsis of Plant Kingdom

This is one of the most important features of the new edition. It constitutes a general running account of the classes, orders and groups of plants, with a brief sketch or characterization of 215 of the leading

families, comprising those that yield practically all the cultivated plants. These family descriptions give the botanical characters; the number of genera and species and the ranges; a list of the important genera; brief statements in regard to the useful plants; and diagrammatic illustrations.

Illustrations

There are 24 colored plates; 96 full page half-tones; and more than 4000 engravings which serve as guides in the text. These color plates

constitute the best possible combination of expert horticultural color photography and color printing, with a mastery in selection such as only Dr. Bailey's knowledge can supply.

The Glossary

This is an analysis of all technical terms that are used in the work and in similar works. It comprises botanical and horticultural terms with brief definitions.

Translation and Pronunciation of Latin Names

In Volume I is inserted a list of between 2000 and 3000 Latin words used as species—names of plants, giving the English equivalent or translation and the pronunciation.

Class Articles

Special effort has been made to secure the best cultural advices for the plants requiring peculiar or particular handling. Here are some of the titles of these articles: Ants; Autumn Gardening; Bedding; Diseases; Drainage; Floral Designs; Formal Gardening; Hotbeds and Coldframes; Insects; Landscape Gardening; Lawn Planting; Orchards; Rock Gardening; Sub-tropical Gardening; Tools and Implements; Village Improvements; Window Boxes, etc.

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INCORPORATED 1902

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100	3½ to 4 ft.
100	4 to 4½ ft.
100	4½ to 5 ft.
75	5 to 5½ ft.
50	5½ to 6 ft.
25	6 to 7 ft.
25	7 to 8 ft.

KOSTER'S BLUE

(Specimen Plants)

100	2 to 2½ ft.
100	2½ to 3 ft.
100	3 to 3½ ft.
100	3½ to 4 ft.
100	4 to 4½ ft.
100	4½ to 5 ft.
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100	5½ to 6 ft.
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NOVEMBER 1918

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"Your fall list, to whose arrival we have looked forward with great pleasure, has been received, and we are not disappointed. Both as a Wholesale Catalogue and as a work of art, it is about perfect. The very attractive pictures hardly do justice to the class of stock which we received from you in the two car-loads of last year.

"Our one adverse criticism of your list would be that it cannot show the quality of service and packing which you give. We marvel that you should be able to produce, in these times, such perfect stock and service at such reasonable prices.

"There is no doubt whatever that when the general run of retail nurserymen become acquainted with your stock, they will not have to think twice as to where to buy. First-class nurserymen as well as first-class retailers in any line, cannot afford to handle an inferior grade if they expect to keep up the good name of their organization. We are banking on the policy of "Quality and Service." We bend all our energies to give our customers nothing but the best of both; and we depend upon the wholesalers for exactly the same thing. "Your list is distinctive and has 'Class.' It represents truthfully the quality and service which you render, and which the people who have not received any stock from you would not know about in any other way.

"We know where to send our orders.

Very sincerely yours,

Westover Nursery Company,

By F. R. von Windegger, Treasurer.

Clayton, Missouri, October 15, 1918."

Having first obtained our correspondent's permission, we now use his letter in this way for the information of the trade, to whose thoughtful consideration it is recommended. The class of business done by Mr. von Windegger's company makes his comment on our stock especially appreciated by us.

Comment by us is unnecessary, except possibly to say that our complete assortment and efficient organization enable us to offer others the same satisfaction confessed by our correspondent. Our List referred to will be gladly sent to any nurseryman asking for it.

Princeton Nurseries, at Princeton, in New Jersey
GROWERS FOR NURSERYMEN ONLY

November 1.

When writing to Advertisers please mention the National Nurseryman.

PAINESVILLE NURSERIES

BIDDING FOR FALL BUSINESS

ORNAMENTALS

ASH

Cut-leaf Wpg. BIRCH

CATALPAS

CORNUS

ELMS

HORSE CHESTNUT

JUDAS

LINDENS

MAPLES

MULBERRIES

—Tea's Wpg. and Globosa

POPLARS

SALISBURIA

SYCAMORE

WILLOWS, Ect.

SMALL FRUITS

CURRENTS

GOOSEBERRIES

BLACKBERRIES, Etc.



FRUIT TREES

APPLES

PEARS

PLUMS, Etc.

SHRUBS and VINES

BUDDLEIA

CALYCANTHUS

CYDONIA

HYDRANGEAS

PRIVET

SPIREAS

WEIGELA

AMPELOPSIS

CLIMBING HSKLS, Etc.

ROSES

HARDY PERENNIALS

PEONIES, PHLOX, IRIS

and complete

General Assortment



* We will have no Dutch Bulbs this Fall; otherwise,
"BUSINESS AS USUAL."

Glad to handle your Want Lists.

THE STORRS & HARRISON CO.

NURSEYRMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

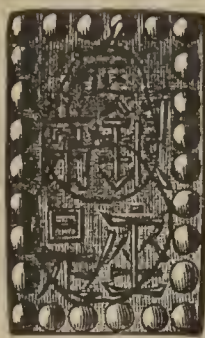
Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa

Subscribers to "Nurserymen's Fund for Market Development."

Heikes—Huntsville—Trees



Established 1872

1500 Acres

FRUIT TREES ROSES and other ORNAMENTALS

For the wholesale trade.
All of our own growing.

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

For Fall of 1918

Ornamentals, Shade Trees, Evergreens,
Perennials, Fruits, etc.

A large stock of the following:

Cherry Trees, 2 yr.
Apple Trees, 2 and 3 yr.
Peach Trees, 1 yr.
Norway Maple up to 2 inch.
Am. Elm, all sizes.

Write for special prices on car lots.

C. M. Hobbs & Sons

Bridgeport, - Indiana

Subscribers to "Nurserymen's Fund for Market Development."

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of Own Root Roses

ORNAMENTAL TREES SHRUBS

BERRIES CLEMATIS

EVERGREENS PEONIES PHLOX

and

HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY

GENEVA, N. Y.

70 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE

THE

North-Eastern Forestry Co.

CHESHIRE

...Connecticut...

SOMETHING YOU NEED

A large stock
In all sizes

We have

Well grown
Priced right

CALIFORNIA PRIVET
NORWAY SPRUCE
CONCORD GRAPE
SILVER MAPLE
SUGAR MAPLE
SYCAMORE
RED BUD
DOGWOOD
CYPRESS
LARCH
ASH
ELM
IRIS

SPIREA VAN HOUTTEI
COMMON SNOWBALL
COTONEASTER
FORSYTHIAS
BARBERRIES
WEIGELIAS
TAMARAX
MAHONIAS
SYRINGAS
ARALIA
SUMAC
LILAC
PEONIES

and our usual supply of similar stock
found in a complete nursery.

H. F. Hillenmeyer & Sons. Lexington, Kentucky
"In the land of the Blue Grass"

FOR FALL DELIVERY

We offer

Amoor River Privet

Ibota Privet

Golden Syringa

Hydrangea P. G.

Write for prices in large or small quantities

J. W. ADAMS NURSERY CO.,

Springfield

Mass.

We are now ready to quote lowest prices on

FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.
Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries

Sparta, Ky.

For FUMIGATION With
HYDROCYANIC ACID GAS

"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by

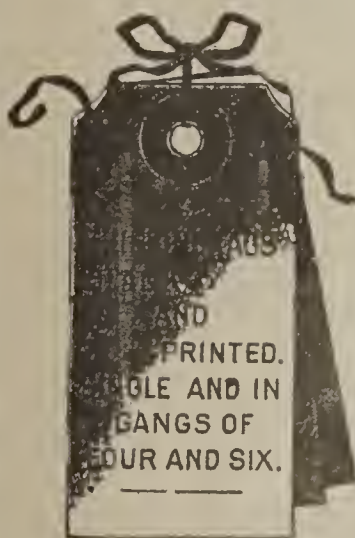
The Roessler & Hasslacher Chemical Co.
100 William St. New York, N. Y.

HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

Rawhide Brand of Shipping
Tags and Tree Labels

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.

West Chester, Pennsylvania

For FALL 1918

We offer a Complete
List of

Shade Trees, Shrubs, Evergreens

WILL BE PLEASED TO
SUBMIT PRICES

AUDUBON Nursery, P.O. Box 731, Wilmington, N. C.

P. OUWERKERK,

No. 216 Jane St., Weehawken Heights, Hoboken, N. J.
Rhododendrons, Clematis, H. P. Roses, Hardy Azaleas,
Paeonies, Magnolias, Box Trees, Fancy Conifers, Hydran-
geas and Shrubs, our specialties at our HOLLAND NUR-
SERIES. Some of the goods on hand here during the
packing season.

Seeds For Nurserymen

Apple, French, Japan and Kieffer Pear, Myroholan Plum and
Quince Seeds. Also Tree, Shrub and Evergreen Seeds in a
large assortment. My Catalogue contains complete list with
Prices. Send for a copy.

THOMAS J. LANE
SEEDSMAN

DRESHER,

Penna., U. S. A.

TREE SEED

Large assortment of Tree, Shrub and Fruit
Seeds for ornamental and forestry purposes.
Send for catalogue. **CONYERS B. FLEU, Jr.**
Germantown, Philadelphia, Pa.

Fresh seed of Clem. Paniculata, Amp. 'Veitchi,' Chionanthus
Virginica, Rhodotypus Kerrioides, Berb. Thunbergus, and over
100 other varieties for nurserymen. All northern collected
and mostly from New England section. Get my list of seeds
and young stock to grow on.

BENJAMIN CONNELL, Florist & Nurseryman,
Merchantville, New Jersey

WE OFFER

Grape Vines, Currants and Gooseberries
in all varieties and grades, also
Grape and Currant Cuttings and Light Grade of Vines for
Lining Out in Nursery Rows
WRITE FOR PRICES

F. E. Schifferli, - Fredonia, N. Y.

"Hathaway's" the Most Extensive, Exclusive Berry Plant Nursery in America

The leading varieties supplied in large quantities, including
Fall Bearers. Currants, Grapes, Gooseberry, Blackberry,
Raspberry and Strawberry. Root Cuttings, Slips, Tips and
Transplants a specialty.

You never delivered finer stock nor received quicker ser-
vice than you get from

Hathaway's Berry Plant Nursery,

Madison, Ohio

PRINTING

Catalogues
Stationery
Business Forms



The Robinson
Publishing Co.
Hatboro, Pa.

Specialists in Nursery Printing
Ask for Prices. We are the printers of this Magazine

CHERRY TREES

We offer, two and three year cherry, also some nice
2 year climbing roses, on own roots. All select stock.
Write for prices in car lots.

MILTON NURSERY COMPANY,

Milton

Oregon

HARDWOOD CUTTINGS PRIVET ALL KINDS

We make a specialty of the above and can give you extra
good service. Write us.

OAKLAWN NURSERY,

Huntsville

Ala.

THE WESTMINSTER NURSERY

J. E. Stoner, Prop.

WESTMINSTER

MARYLAND

Offers for Fall, 1918:

10,000 Monacacy Apple, 2 yr., Buds.
250,000 Cal. Privets, 2 yr. and 3 yr.
500,000 Asparagus Asst., 2 and 3 yr.
Barberry Thun., 3 yr., extra fine.
Lombardy Poplars, 8 to 16 feet.
Oriental Planes, 8 to 16 feet.
Tulip Poplars, 6 to 12 feet.
Horse Chestnuts, 8 to 12 feet.
Catalpa Speciosa, 8 to 12 feet.

Can supply the above in CAR lots.

We also offer in large lots, Rhubarb, Cumb. Raspberry,
Ruby, Miller, and St. Riggs Raspberry Altheas, 3 to 5 feet,
Deutzias, and Spireas Asst., Hydrangeas P. G. Etc. Will
make low prices for early orders.

FAIRFIELD NURSERIES

FRUIT AND SEED FARMS

OFFER for Fall 1918

GRAPE VINES—One and two years old. Varieties
largely Moore's Early, Concord and Niagara.

Also Scarlet or Crimson Clover Seed and Cow Peas.
Free from weed seeds, all recleaned and guaranteed first
class.

Correspondence solicited. Price list upon request.

CHAS. M. PETERS

P. O. Address, Salisbury, Wicomico County, Md., R. F. D. 3

Long Distance Phone and Telegraph, Salisbury, Md.

EVERBEARING STRAWBERRY PLANTS

If you need Everbearing strawberry plants to fill spring
orders or if you wish to increase your planting in nurseries,
we can supply you with genuine **PROGRESSIVE** Everbearing
plants, guaranteed to be **TRUE TO NAME** and handled so as
to reach you in best of growing condition. Write for prices.

We have been growing and breeding the Everbearing straw-
berries for the past eight years and have many new varieties
growing in our experimental grounds that are not yet for sale.
We invite a personal visit to our grounds during fruiting sea-
son, preferably during August or September. The latch string
is always out.

THE GARDNER NURSERY CO., Drawer 103, Osage, Iowa.

Wanted Peonies

Three to five eyes, mixed varieties, in large quantities.

Write letter "H," care "The Nurseryman," quoting best possible CASH prices and state quantities and time of delivery.

FALL 1918 AND SPRING 1919

We offer **strawberry plants**, leading standard and everbearing varieties. **Asparagus Roots** 1 and 2 year. **California Privet** 1 and 2 years. We make a specialty of the above and can give you first class service. Our price-list contains complete list of other stock. Write for a copy.

BUNTINGS NURSERIES

G. E. Bunting & Sons,

Selbyville,

Delaware.

Subscribers to "Nurserymen's Fund for Market Development"

You can save Time and Money

If you use our neatly packed

SHEET NURSERY BURLAP

Put up in bales

In various size sheets ranging in sizes from 24x24 to 40x40 in.

Write for particulars

Sarachan & Rosenthal

64-66 Hanover Street

Rochester, - - New York

Vincennes Nurseries, W. C. REED, Prop.

VINCENNES, - - INDIANA

We are pleased to offer for Fall or Spring:

CHERRY, 2 year X X 1 inch up, also $\frac{3}{4}$, $\frac{5}{8}$ and lighter grades.

CHERRY, One year $1\frac{1}{16}$ up, $\frac{5}{8}$ & $\frac{1}{2}$ to $\frac{5}{8}$

Our Blocks of Cherry are largest to be found in U. S.

We bud annually 500,000 Cherry, they are making splendid growth.

Peach, One Year, all grades leading Varieties.

Plum, Japan and European, One and 2 year.

APPLE, 2 year, a few cars for late fall shipment.

Grafted Hardy Northern Pecans.

Car Lots a specialty, also fair assortment of Ornamentals.

Subscribers to "Nurserymen's Fund for Market Development."

Rice Brothers Company

GENEVA, - N. Y.

Before placing your order for Fall, 1918, and Spring, 1919, get our prices on:—

APPLE, PLUM,

PEAR STD. and DWARF,

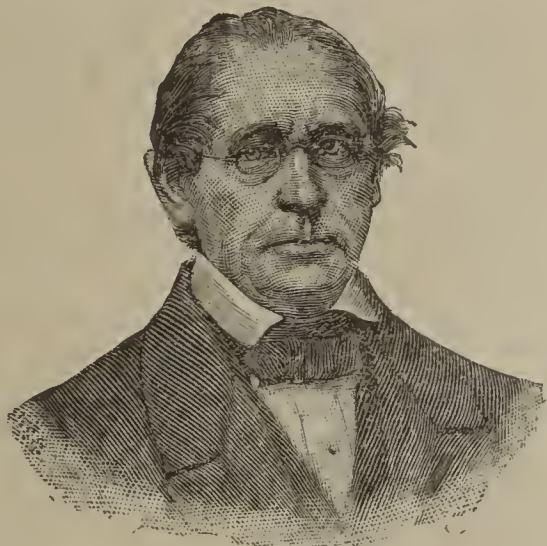
PEACH, CHERRY,

QUINCE, APRICOT,

ROSES, SHRUBS,

ORNAMENTAL TREES, ETC.

Large assortment of above.



N. G. B. DEXTER

Established 1820

DEXTER GRAFTING TWINE

Especially prepared for Nursery
and Greenhouse Grafting

Put up in boxes containing 20 balls. Also
furnished on cones and tubes unbleached.

This yarn is so wound that it can be readily soaked in hot wax and so twisted that it is strong enough to wrap without breaking, yet it is easily broken when the winding is completed.

We also make a special twine on tubes, balls and cones for the Reed Bell Graft Wrapping Machine. Samples and prices furnished on request.

DEXTER YARN COMPANY

PAWTUCKET,

R. I.

When writing to Advertisers please mention the National Nurseryman.

Peonies--Special Offer

10,000 Duchesse de Nemours

White. Early. Wonderful bloomer and most profitable of all the white varieties.

Strong, selected, three to five eye divisions for immediate shipment.

We guarantee quality to please you

List of other select varieties on application

Harmel Peony Company

Berlin, Maryland

We solicit correspondence and a list of your wants

FOR FALL 1918--SPRING 1919

CALIFORNIA PRIVET, 2 yr. extra good.

All grades--Special prices on carload lots. Samples if desired.
Oriental Planes and Norway Maples, Pin and Willow Oaks,
Lombardy Poplars.

A select lot of trees in all sizes--transplanted.

APPLES, 3 yr. with 2 yr. heads.

These are good trees, but not as smooth as trees with 1 year heads.

We offer them at a low price. Samples if interested.

1 YEAR APPLE BUDS

All the Standard Varieties in 2-3 ft. and 3-4 ft. grades.

MISCELLANEOUS

A good stock of Flowering Shrubs, Shade Trees, etc., etc.

Baltimore, Md.

404 W. Baltimore St.

Franklin Davis Nurseries, Inc.

JOSEPH DAVIS, General Manager.

A Tree With a "Head"

is a good description of the Norway Maples in our nursery blocks. They have been intelligently grown from the start; transplanted several times to make root growth; cultivated and cared for properly. Straight trunk (with caliper of 1 to 3½ inches) and well rounded top.

Write us for prices on any reasonable quantity. We can ship by car-load to distant points, or by motor truck to places near New York City.

SWAN RIVER NURSERY

Patchogue, N. Y.



1857

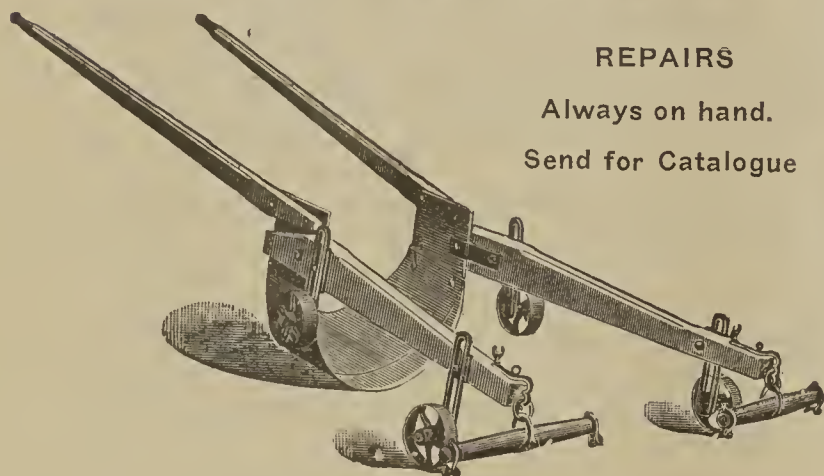
1918

BRAGG'S COMMON SENSE TREE DIGGER

REPAIRS

Always on hand.

Send for Catalogue



Digger gets All the Roots at the rate of Twenty to Forty Thousand trees per day, and only needs same power as plow.

L. G. BRAGG & CO.

KALAMAZOO, MICH.

Hill's Evergreens

We are headquarters for Everything in the Evergreen line, and with few exceptions have our usual full supply, but some things are scarce and getting scarcer every day. Owing to lack of imports, demand is brisk, and shrewd Nurserymen are covering their requirements early.

Nurserymen—Send us your list of wants in young Evergreens for lining out. Also Deciduous Trees, Shrubs and Vines. Our Propagation Department is one of the largest and most complete in America, and feel sure we can save you money and give complete satisfaction.

Dealers—Let us take care of your wants in Windbreak, Hedge and Ornamental Evergreens. Send in your list for pricing now, while assortment is complete.

Fall 1918 Trade List ready September 1st.



The D. HILL Nursery Co., Inc.

Evergreen Specialists

LARGEST GROWERS IN AMERICA

Box 401

Dundee, Ill.

When writing to Advertisers please mention the National Nurseryman.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERYSTOCK

The National Nurseryman Publishing Co., Incorporated

Vol. XXVI.

HATBORO, PENNA. NOVEMBER, 1918

No. 11

SHRUBBY VINES

The work of the amateur landscape gardener can usually be distinguished by the evident restricted acquaintance with a great variety of plants. He invariably

of planting Boston or English ivy or trailing roses, but selected a seldom used plant with excellent results.

The plant used, *Celastrus scandens*, does not hide the



Celastrus scandens clothing a garden wall

uses the same kind for so many different purposes, sameness and monotony being the result.

Our illustration shows a pleasing bit of masonry in the garden where the planter did not follow the beaten path

masonry but just clothes it enough to soften the hard lines and make the wall a part of the garden.

The loose, yet nestling habit of the plant just suits that particular place and purpose and is a decided change

from the clinging vines and much-used roses.

Many plants that have sterling qualities are seldom used because they are not particularly attractive or showy in themselves, yet when used in the right place give effects that are very beautiful.

Other shrubby vines of a similar type to our illustration and which can be used to good effect in like situations are:—*Evonymus radicans Carrierei* and *Vegeta Cotoneaster horizontalis*, *Lonicera pileata* and *Jasminum nudiflorum*. All these are evergreen and very desirable on that account.

Among the deciduous plants in addition to the *Celastrus scandens* that are very little used are *Lonicera Heckrotti*, *Hydrangea scandens*, *Lycium Chinense* and *Bignonia grandiflora*.

They are all woody growth and bunchy habit, making them invaluable for furnishing low walls or copings, rocks and banks.

In the background of the picture is shown an open arrangement of individual trees and shrubs, while such an arrangement is rarely practiced by landscape gardeners, grouping and massing being the prevailing fad or fashion, it is the only way the individual tree or bush can be seen in perfection. An opportunity should never be missed to give a choice plant room to develop as an individual specimen.

The landscape gardener who is plantsman enough to produce his sky lines, mass effects, color schemes and groupings and yet give each individual plant opportunity to show its individual beauty is the master of his art.

A NURSERYMAN'S LETTER FROM THE FRONT

Over There, August 7, 1918.

Dear Dad:—

A week has passed since I last wrote. The only mail received since then was the leaflet of songs from the 43rd Convention, with a "follow the lead of these Warblers," that made me long for the time when I could be back following their lead in reality. My, what songs they are. I can easily imagine how great was the spirit and feeling put into the singing.

There is one, "There's a Long, Long Trail" that we of the section are particularly fond of. Do you remember the time, and the volume of thought in the verse? Whenever I hear it a certain picture comes flitting through my memory.

We were laying at anchor in Halifax Harbour. It was just as the sun was setting and a mighty British battleship was putting out to sea—to battle. She fairly bristled with long dark gun barrels. Along the deck the crew stood at attention, and on the aft deck the band was assembled. Just as the cruiser came opposite, the band struck up "There's a Long, Long Trail awinding—" until they were quite a distance off. As the last notes came echoing back to us we sort of awoke from the spell and all voices arose as one in a mighty cheer, which they answered, and cheer followed cheer until the nets were cleared and they had straightened out for the pull to the open sea.

The smoke that had been lazily rolling out of the fun-

nels now came belching forth. The crew could just be distinguished as they hurried about making the few last things ship-shape and ready for anything that might chance their way. It was a great, thrilling sight. Here at last we were on our way to the great adventure! There on the ship that had just cleared port we saw a very vivid phase of the adventure. That night we went to our bunks a sober, more thoughtful bunch of boys, stronger than before.

Almost a year has passed since then, a year full of first doubt, then hope, until now we feel that we have crossed the bar. We have made the open sea and it is just straight hard sailing that lies ahead. That is our task until the port of victory is reached.

What a lot has happened since then! We have known the keen pleasure of being on the stage where the spotlight of the whole world is focused. We have realized its seriousness, its sadness, its doubt, and last but not least the great feeling of relief that comes when we find the task has been done right, the folks at home will have no reason to be ashamed of us. That is the only glory and splendor in war, the realization that you have done your best, and that it is bringing results.

We realized all this when our division of French Poilus left the N— section, where they had first halted and then barred the road to P—, later going back a little way to be in reserve. Here we stayed several days, wondering when and where the next blow would come. At last it came, and off we went to do our bit. Toward the close of the day we reached the main road and saw again an army on the march, and the sad flight of the refugees. The memory of the almost endless string of horses, guns and men, all in blue, all going the same way, to turn the tide, will never fade. When night fell the sky ahead was lit by flares and flashes of ammunition dumps and supplies burning to keep them from falling into enemy hands.

Even as we stopped for the night in an almost deserted town, still some miles from the lines, the first few shells came screeching in, breaking with a crash. Next day we moved on, going into action as soon as the lines were reached. For four days and nights we toiled as never before, with the line wavering first one way and then the other. Toward the middle of the third night things quieted down a bit so that we were able to catch a bit of sleep.

At one post, the boy who wrote home and gave such a vivid description of our first experience was sleeping with a comrade, when a 250 crashed into the dugout—we lost two of our best chums!

It seems this was a prelude to the coming day, the worst we experienced. The enemy had had time to place his guns and bring up fresh troops for a fresh attempt. The line sagged, a bit of ground was given and a forward post was taken, with it three more of our comrades.

At the top of the next hill Fritz met our reserves and fell back time after time from the steady determination of the Poilus. Then we were relieved, a fresh lot taking our places. We had done our bit, the invader had been halted long enough for the reserves to take up positions on a line that would never break.

Since then we have rested a bit and taken our place

in the line, but in a quiet sector. Here things run along smoothly and we are hoping to be able to stay for the much-needed rest. In the meanwhile, the master hand has decided to play one of his trumps, the ground where we spent such anxious hours is way behind, the wedge has been pinched off, and all are wondering and trying to guess where the next trump will be played. We haven't the slightest idea, but know it will come and at the proper time.

With best of love to all.

As ever your son,

BILL.

(WM. FLEMER, JR.)

Jackson & Perkins, Newark, N. Y., issued their trade list September 14th.

It is good to note the optimism that is behind the stock which this list represents.

A full business-like catalogue indicates the same condition in the nursery.

It leads off with Roses in big assortment followed by vines and perennials specializing on Philox and Paeonies.

The shrub assortment is very full and shows a fine stock of named lilacs.

The tree list contains a good variety of flowering crabs, and the fruit list offers Dwarf Apples on English Paradise stocks in fifteen varieties.

Proposed New Restrictions Covering Imports of Nursery Stock

UNITED STATES DEPARTMENT OF AGRICULTURE
Federal Horticultural Board,
Washington, D. C.

August 29, 1918.

Dear Sir:—

The experts of this Department have given careful consideration to the restrictions which should be placed on the importation of nursery stock, plants, and seeds into the United States as a result of the hearing of May 28, 1918. It is proposed to make these restrictions effective on and after June 1, 1919. The proposed quarantine will exclude all plants and plant products for propagation from all foreign countries, except as provided for in the regulations issued under the quarantine. For your information, and for any suggestions which you may care to make, I am sending you a copy of the tentative regulations governing the importation of such nursery stock, plants and seeds into the United States. In the provisional recommendations of the Bureau of Plant Industry, submitted as a tentative program of action in connection with the notice of hearing, it was provided that some four groups of plants, normally imported with earth about the roots, should be prohibited entry at future dates; in the case of three of these groups beginning July 1, 1919. The regulations as now drafted eliminate these groups altogether. Except as to the group (Azaleas, etc.) for which a longer period was suggested, this is not a wide variation from the tentative program, inasmuch as the regulations now proposed do not go into effect until June 1, 1919. Furthermore, under existing war conditions and the action of the War Trade Board, importations of plants of all of these groups will be greatly limited if not stopped for the period of the duration of the war.

Regulation 2 provides for the unrestricted entry of two groups of plants, namely (1) fruits, vegetables, cereals, and other plant products imported for food purposes; and (2) field, vegetable, and flower seeds.

Regulation 3 provides, under compliance with the conditions of the subsequent regulations, for the importation of five groups of plants as follows:

- (1) Lily bulbs, lily of the valley, narcissus, hyacinths, tulips, and crocus, free from balls of soil or earth.
- (2) Fruit stocks, seedlings, cuttings, scions, and buds of fruits for reproduction purposes.
- (3) Rose stocks for reproduction purposes, including Manetti, Multiflora, Brier Rose, and Rosa Rugosa.
- (4) Nuts, including palm seeds, for oil or reproduction purposes.
- (5) Seeds of fruit, forest, ornamental, and shade trees, seeds of deciduous and evergreen ornamental shrubs, and seeds of hardy perennial plants.

These groups of plants and seeds under regulations 2 and 3 include the plants and seeds which were represented as essential to the floriculture and horticulture of this country, namely, the

field, vegetable, and flower seeds, and fruit stocks, cuttings, scions, etc., and rose stocks for reproduction purposes.

The subsequent regulations, prescribing conditions of entry of the groups of plants enumerated in regulation 3, are based very largely on regulations hitherto enforced governing the entry of nursery stock. Provision has been made, however, in regulation 10 for the disinfection of plants offered for entry should, in the judgment of this Board and the inspectors of the Department of Agriculture, such disinfection be necessary.

The Board will be glad to have your association give careful consideration to these regulations and, if it seems desirable, a conference can be arranged for a discussion of these regulations. It is the wish of the Board to meet any reasonable objections which can be presented, and which will not involve a material increase of risk of entry of new plant pests.

The quarantine will provide for the importation, through the agency of the U. S. Department of Agriculture, of plants and seeds for experimental or scientific purposes, and by this means it will be possible to import novelties or other plants and seeds for which special need can be shown. This does not mean, however, that the Department will undertake commercial importations for private firms.

Yours very truly,

C. L. MARLATT, Chairman of Board.

RULES AND REGULATIONS GOVERNING THE IMPORTATION OF NURSERY STOCK, PLANTS, AND SEEDS INTO THE UNITED STATES.

(Effective on and after June 1, 1919, and superseding the regulations heretofore issued governing the importation of nursery stock.)

REGULATION 1. DEFINITION.

For the purpose of these regulations the words "plants and seeds" shall wherever used include all field-grown florists' stock, trees, shrubs, vines, cuttings, grafts, scions, buds, fruit pits and other seeds of fruit and ornamental trees or shrubs, and also field vegetable, and flower seeds, bedding plants, and other herbaceous plants, bulbs, and roots, and other plants and plant products for propagation.

REGULATION 2. PLANTS AND SEEDS FOR WHICH PERMIT IS NOT REQUIRED

The following classes of plants and seeds, not including, however, the particular plants and seeds named in Appendix A, which are governed by special quarantines now in force, nor such as may hereafter be made the subject of special quarantines, may be imported without permit or other compliance with these regulations.

- (1) Fruits, vegetables, cereals, and other plant products imported for food purposes.
- (2) Field, vegetable, and flower seeds.

REGULATION 3. PLANTS AND SEEDS FOR WHICH PERMIT IS REQUIRED.

The following plants and seeds, not including, however, those names in Appendix A, which are governed by special quarantine

now in force, nor such as may hereafter be made the subject of special quarantines, may be imported under permit upon compliance with these regulations, but, where a particular purpose is specified, for that purpose and no other:

- (1) Lily bulbs, lily of the valley, narcissus, hyacinths, tulips, and crocus, free from balls of soil or earth.
- (2) Fruit stocks, seedlings, cuttings, scions, and buds of fruits for reproduction purposes.
- (3) Rose stocks for reproduction purposes, including Manetti, Multiflora, Brier Rose, and Rosa Rugosa.
- (4) Nuts, including palm seeds, for oil or reproduction purposes.
- (5) Seeds of fruit, forest, ornamental, and shade trees, seeds of deciduous and evergreen ornamental shrubs, and seeds of hardy perennial plants.

REGULATION 4. APPLICATION FOR PERMITS FOR IMPORTATION OF PLANTS AND SEEDS.

Persons contemplating the importation of plants and seeds* the entry of which is permitted under these regulations shall first make application to the Federal Horticultural Board for a permit, stating in the application the exact designation of the plants and seeds to be imported, the name and address of the exporter, the country and locality where grown, the port of entry, and the name and address of the importer in the United States to whom the permit should be sent.

Applications for permits should be made in advance of the shipment of the plants and seeds, but if, through no fault of the importer, plants and seeds the entry of which is permitted under these regulations should arrive before the issuance of a permit the plants and seeds will be held in customs custody at the risk and expense of the importer for a period not exceeding 20 days pending the issuance of a permit.

Applications may be made by telegraph, in which case the information required above must be given.

Permits are not required for plants and seeds, not under quarantine or regulation, entering the United States for immediate transportation in bond to foreign countries.

Applicants for permits to import plants and seeds from countries which do not maintain plant and seed inspection (see appendix) must include in their application a definite statement of the quantity of plants and seeds to be imported. Plants and seeds may be imported into the United States from such countries only for experimental purposes and in limited quantities, except that tree seeds may be imported from such countries in commercial quantities.

REGULATION 5. DELIVERY IN BOND.

If the permit required for the importation of plants and seeds, the entry of which is permitted under these regulations, from countries which maintain plant and seed inspection, be not at hand at the time of the arrival at the port of entry of the plants and seeds, such plants and seeds may be delivered to the importer, consignee, or agent for the proper care thereof upon the filing of a bond with approved sureties in double the invoice value of the property (but in no case less than \$20), conditioned upon the redelivery thereof to the collector within 20 days from the date of arrival, and providing that the same shall not be removed from the port of entry within such period except upon the presentation of the proper permit and compliance with the conditions of Regulation 10; or, if the importer, consignee, or agent shall so elect, the goods may, so far as the Department of Agriculture is concerned, be retained in customs custody for a period not exceeding 20 days, pending the issuance of the permit, wholly at the risk and expense of the importer.

REGULATION 6. ISSUANCE OF PERMITS.

On approval by the Secretary of Agriculture of an application for the importation of plants and seeds a permit will be issued in quadruplicate. One copy will be furnished to the applicant for presentation to the customs officer at the port of entry, one copy each will be mailed to the collector of customs and inspector of the Department of Agriculture at the port of entry, and the fourth will be filed with the application.

*A post office order dated May 27, 1913, as amended December 16, 1913, prohibits the importation by mail of all growing or living plants, seeds, and other plant products for propagation, except field, vegetable, and flower seeds.

Permits shall be valid until revoked unless otherwise specified therein and will be issued for the ports of Boston, New York, Newark, San Francisco, Seattle, and such other ports as may from time to time be approved by the Federal Horticultural Board. The permit will be addressed to the collector of customs at the port for which it is issued.

REGULATION 7. CANCELLATION OF PERMITS FOR VIOLATION OF REGULATIONS.

Permits may be cancelled, and further permits refused, for the importation of the products of any grower or exporter who has knowingly violated the Plant Quarantine Act or the regulations thereunder.

REGULATION 8. INSPECTION, CERTIFICATION, AND MARKING OF PLANTS AND SEEDS AS A CONDITION OF ENTRY.

The importation of plants and seeds from countries which maintain plant and seed inspection will not be allowed unless the invoice is accompanied by an original certificate, and unless each container bears a copy certificate, issued by a duly authorized official of the country from which it is exported, stating that the plants and seeds covered by the certificate have been thoroughly inspected by him or under his direction and found, or believed to be, free from injurious plant diseases and insect pests. Plants and seeds exported between October 1 and May 31 shall be inspected on or after the 1st of October, and plants and seeds exported between June 1 and September 30 shall be inspected at the time of packing: PROVIDED, That for tropical and semi-tropical countries, or for stock grown under glass, the inspection shall be at time of packing throughout the entire year.

Plants and seeds from countries which do not maintain plant and seed inspection shall not be delivered to the importer or consignee until they have been examined by an inspector of the Department of Agriculture and found to be free from plant diseases and insect pests, or, if infested, capable in the judgment of the inspector of being adequately safeguarded by disinfection. All importations under this paragraph must also comply with the disinfection requirement of Regulation 10. Plants and seeds inspected as provided herein, which are found to be carrying any plant disease or insect pest, and which, in the judgment of the inspector can not be cleaned by disinfection or treatment, shall be refused entry. All charges for storage, cartage, and labor incident to inspection, other than the services of the inspector, shall be paid by the importer.

If a package of plants and seeds offered for entry includes any prohibited article, the entire package will be refused entry.

Each case, box, or other container or covering of plants and seeds offered for entry shall be plainly and correctly marked to show the number of the permit, the general nature and quantity of the contents, the district or locality and country where grown, the name and address of the exporter, and the name and address of the consignee.

REGULATION 9. FOREIGN CERTIFICATE OF INSPECTION.

Each certificate and copy certificate shall give the date of inspection; name of the grower or exporter; the district or locality and the country where grown; and a statement that the plants and seeds have been inspected by a duly authorized official and found, or believed to be, free from insect pests and plant diseases. The original certificate shall be signed and sealed by, and the copy certificate shall bear the seal of, a responsible inspection official for the country of origin.

Permits may be canceled and further permits refused for the importation of plants and seeds from any country whenever such plants and seeds, in the judgment of the Federal Horticultural Board, are found to be so infested as plainly to indicate that the foreign inspection is merely perfunctory, and such country shall thereafter be classed as a country which does not maintain plant and seed inspection until satisfactory evidence is presented to show that the regulations of the Board have been complied with.

Lists of officials in foreign countries authorized to inspect plants and seeds, giving their names and official designations, will be furnished to collectors of customs through the Secretary of the Treasury.

REGULATION 10. DISINFECTION A CONDITION OF ENTRY.

Plants and seeds imported under Regulation 3 shall be subject as a condition of entry, to such disinfection as shall be required by the inspector of the Department of Agriculture. When disinfection is required, the plants and seeds involved will be delivered to the permittee for disinfection upon the filing with the collector of customs of a bond in the amount of \$5,000, or in an amount equal to the invoice value of the plants and seeds if such value be less than \$5,000, with approved sureties, conditioned upon disinfection of the plants and seeds, under the supervision of an inspector of the Department of Agriculture, and upon the redelivery of the plants and seeds to the collector of customs within 40 days from arrival of the same at the port of entry. The plants and seeds shall not be removed from the port of entry, nor shall any case or other container thereof be broken or opened, until a written notice is given to the collector of customs by an inspector of the Department of Agriculture that the plants and seeds have been properly disinfected.

REGULATION 11. NOTICE OF ARRIVAL BY PERMITTEE.

Immediately upon arrival of the plants and seeds at the port of entry, the permittee shall submit in duplicate notices to the Secretary of Agriculture, through the collector of customs, on forms provided for that purpose, stating the number of the permit, date of entry, name of the ship or vessel, the country and locality where grown, name of the foreign shipper, number of cases and marks and numbers on cases, the general nature and quantity of the plants and seeds, port of entry, and the name of the importer or broker at the port of entry.

REGULATION 12. NOTICE OF SHIPMENT BY PERMITTEE.

After entry of the plants and seeds and before removal from the port of entry for each separate shipment or consignment thereof the permittee shall notify the Secretary of Agriculture in duplicate, on forms provided for that purpose, stating the number of the permit, the date of entry, the port of entry, the customs entry number, name and address of the consignee to whom it is proposed to forward the plants and seeds, the general nature and quantity of the plants and seeds, the number of cases or other containers included in the shipment, and the case or container numbers and marks, together with the probable date of delivery for and route of transportation. A separate report is required for each ultimate consignee.

At the same time a copy of the notice to the Secretary of Agriculture shall be sent by the permittee to the duly authorized inspector or other officer of the State, Territory, or District to which the plants and seeds are to be shipped. A list of such inspectors and officers is appended.

Permits may be canceled and further permits refused if a permittee fails to give either of said notices or gives an incomplete notice, or gives a false notice or knowingly mislabels any plants or seeds with intent to evade any provision of the Plant Quarantine Act or of any regulation thereunder.

Should a consignee named in such a notice ship or deliver for shipment to any other State, Territory, or District such plants or seeds before they have been inspected by a duly authorized State, Territorial, or District inspector or officer, he shall, prior to such shipment, give like notice to the Secretary of Agriculture and to the duly authorized inspector or other officer of the State, Territory, or District to which the plants and seeds are to be reshipped.

Plants and seeds which have been once inspected by a duly authorized State, Territorial, or District inspector or other officer, will be allowed to move interstate without restrictions other than those imposed on the interstate movement of domestic nursery stock.

REGULATION 13. MARKING A CONDITION OF INTERSTATE SHIPMENT.

No person shall ship or deliver for shipment from one State, Territory or District of the United States into any other State, Territory or District any imported plants and seeds the case, box, package, crate, bale, or bundle whereof is not plainly marked so as to show the general nature and quantity of the contents, the name and address of the consignee, and the country and locality where such plants and seeds were grown, unless and until such imported plants and seeds have been inspected by the proper official of a State, Territory, or District of the United States.

REGULATION 14.

These regulations shall not apply to the importation by the United States Department of Agriculture of plants and seeds for experimental or scientific purposes.

The above rules and regulations are hereby adopted and shall be effective on and after June 1, 1919, and shall supersede on and after said date the rules and regulations governing the importation of nursery stock into the United States, which were promulgated to take effect on and after July 1, 1916.

SECRETARY OF AGRICULTURE.

APPENDIX A.

(a) Irish potatoes from all countries except the Dominion of Canada and Bermuda. Irish potatoes may be imported from any foreign country into the Territories of Hawaii and Porto Rico, for local use only, free from any restrictions under the Plant Quarantine Act.

(b) Oranges, sweet limes, grapefruit, mangoes, achras sapotes, peaches, guavas, and plums from the Republic of Mexico.

(c) All five-leaved pines and all species and varieties of the genera *Ribes* and *Grossularia*, from each and every country of Europe and Asia and from the Dominion of Canada and Newfoundland.

(d) Cotton seed (including seed cotton) of all species and varieties, and cottonseed hulls, from any foreign locality and country.

(e) Seeds of the avocado or alligator pear from Mexico and the countries of Central America.

(f) Living canes of sugar cane or cuttings or parts thereof from all foreign countries. There are no restrictions on the entry of such materials into Hawaii and Porto Rico.

(g) All citrus nursery stock including buds, scions, and seeds, from all foreign localities and countries.

(h) All pines not included in paragraph (c) from all European countries and localities.

(i) Seed and all other portions in the raw or unmanufactured state of Indian corn or maize (*Zea mays L.*), and the closely related plants, including all species of Teosinte (*Euchlaena*), Job's tears (*Coix*), *Polytoca*, *Chionachne*, and *Sclerachne*, from southeastern Asia (including India, Siam, Indo-China, and China), Malayan Archipelago, Australia, New Zealand, Oceania, Philippine Islands, Formosa, Japan, and adjacent islands.

(j) All species and varieties of citrus fruits from eastern and southeastern Asia (including India, Siam, Indo-China, and China), the Malayan Archipelago, the Philippine Islands, Oceania, (except Australia, Tasmania, and New Zealand), Japan (including Formosa and other islands adjacent to Japan), and the Union of South Africa.

(k) All varieties of sweet potatoes and yams (*Ipomoea batatas* and *Dioscorea* spp.) from all foreign countries and localities.

(l) All species or varieties of banana plants (*Musa* spp.) from all foreign countries and localities.

(m) Fruits of the avocado or alligator pear and avocado nursery stock less than 18 months of age from Mexico and the countries of Central America.

(n) Cotton from all foreign countries and localities.

(o) Cottonseed oil from Mexico and cottonseed cake, meal, and all other cottonseed products, except oil, from all foreign countries.

CONFERENCE ON NURSERY STOCK, PLANT, AND SEED EXCLUSION, CALLED FOR OCT. 18, 1918.

SPECIAL NOTICE

On account of the prevalence of influenza in Washington, it is suggested that all persons who have no special reasons for wishing to attend the conference called for October 18 at the Department of Agriculture, Washington, to consider the restrictions which should be placed on the importation of nursery stock, plants, and seeds into the United States, submit their constructive suggestions or criticisms in writing rather than giving personal attendance at the conference. Such written statements will be given full consideration by this Department.

The quarantine and regulatory action which this Department now contemplates, has been carefully considered, following the hearing of May 28, 1918, on the subject, and has been placed in the hands of all interested parties in the statement distributed August 29, 1918, to which was attached the text of the proposed regulations. The subject, therefore, is fully in the hands of interested persons, and an open discussion, while it would undoubtedly be helpful, is not a necessity.

The following telegram has been sent in response to a number of inquiries as to the desirability of conducting the plant quarantine conference on the date fixed:

"Inadvisable to postpone on account of local health conditions action by Department Agriculture on proposed plant quarantines. Department program has been fully presented, and criticisms or suggestions submitted in writing by persons who do not care to attend, will be given full consideration. Written statements preferred to attendance."

Please advise all interested parties of this suggestion.

C. L. MARLATT, *Chairman of Board.*

Mr. Orlando Harrison, Berlin, Md., chairman of the Legislative Committee of the American Association of Nurserymen, went to Washington to attend the conference on Nursery Stock, Plant and Seed exclusion, called for October 18, 1918, with the expectation of entering a general protest on behalf of the National Association, particularly in relation to the proposed prohibition of importing small one and two year old cuttings, seedlings and grafts of ornamental stock.

There seems to be no valid reason offered why this class of stock should be prohibited, while fruit and rose stocks should be allowed entry. They are just as essential and there is no more danger from the one than the other. They can be as readily examined as fruit stocks.

It does not seem fair to the nurserymen who grow ornamental nursery stock to cut off their source of supply while permitting the importation of fruit stock by nurserymen who grow fruit trees.

Mr. J. D. Eisele, of the Henry A. Dreer Company made a strong plea against the ban on greenhouse plants, such as palms and araucarias and also pointed out the fallacy of differentiating between Manetti rose stocks and grafted roses and other plants that come in with bare roots.

The florist interests were represented by Charles Lottey, President of the Society of American Florists, E. G. Hill, Richmond, Indiana, and William F. Gude, Washington, D. C.

EXPERIMENTS ON APPLE SEEDLINGS

The Indiana Horticultural Society's experimental orchard according to the Experiment Station Record has made some interesting experiments in relation to the apple which J. A. Burton, the superintendent summarises as follows:—

The orchard was started in 1899, largely for variety testing, and was transferred by the society to Purdue University in 1917. The prime purpose of the orchard was to produce new and better varieties of apples. In 1900, 10,000 seeds were planted in nursery rows and more seed was planted in 1905. One thousand seedlings of known parentage resulting from cross-pollinations have also been grown.

Summing up the results of the work with seedlings it is concluded that there appears to be no way of forecasting the value of the fruit of an apple tree by the habit of growth of the seedling. Varieties from which seeds have been planted are Grimes, Stayman Winesap, Rome Beauty, Ben Davis, Salome, Kansas Keeper, Mann, and Kentucky Cider Crab. Seventy-five per cent of the resulting seedlings have been fairly good. Winesap gave the largest number of promising seedlings. Seedlings of Winesap generally preserved the poor root system of the parent and those of Ben Davis the good root system of the parent. From all of the seeds planted in the orchard there has never been a reproduction of the original variety even when fertilized by its own pollen.

Studies of the influence of stock on scion have indicated that certain stocks do influence the scion and that others do not. In one case, scions of Yellow Transparent

and Chenango were grafted on a wild crab, which had been bearing heavy crops of fruit previous to the insertion of the scions. The stock has not influenced the fruit of either variety, but the ungrafted crab limbs have borne no more fruit and the growth of the stock has been restricted to the limbs bearing the scions. The inserted scions have grown rapidly, whereas there has not been a new growth on the crab limbs of half an inch in the last 13 years.

A comparative test of scions taken from nursery stock and from bearing trees resulted in no observable difference in the bearing qualities of the grafts. The same was true of water sprouts used as scions. Likewise, variations in size and color of fruit of the same variety as observed on different trees were nullified when scions from these trees were grafted on the same tree. From these results as a whole it is concluded that the observed variations within varieties are probably due in almost every case to environment rather than to bud variations and that there is little chance of improving apple varieties through bud selection.

State of New York Department of Farms and Markets
Division of Agriculture, Albany

October 1, 1918.

To Whom it May Concern:

Whereas, A dangerously injurious insect known as the oriental peach moth, *Laspeyresia molesta*, has been located and presumably distributed in Dutchess, Westchester, Nassau and Richmond Counties, in the State of New York.

Now, therefore, I, Charles S. Wilson, as Commissioner of Agriculture of the State of New York, by virtue of the power conferred and duties imposed upon me as such by the provisions of the Agricultural Law, hereby forbid the shipment of any peach trees or sweet cherry trees outside of the said counties of Dutchess, Westchester, Nassau and Richmond, to any point outside of the boundaries of each of said counties.

This order shall take effect on the date hereof and remain in full force and effect until further order.

CHARLES S. WILSON, *Commissioner of Agriculture*.

Dansville, N. Y., Oct. 5, 1918.

This is an answer to yours of the 1st and to advise that we do not want to continue our advertising, as the space which you have been running for us has practically cleaned up our stock.

We have very little to offer from now on and assure you we are more than satisfied with the results we have had from your paper.

Another season will be glad to repeat our order.

Very truly yours,

MALONEY BROS. & WELLS Co.,
W. J. Maloney

First Annual Convention of the Southwestern Nurserymen's Association

The first annual convention of the Southwestern Nurserymen's Association was held at Denison, Texas, September 24th and 25th.

This association was organized last year by the nurserymen of Arizona, Arkansas, Louisiana, New Mexico, Oklahoma and Texas, and takes the place of the state organizations.

The attendance was very encouraging and gave promise of future value to the trade of this section. It is estimated 90 per cent. of the nurserymen of the above states were represented.

The program was as follows:—

TUESDAY, SEPTEMBER 24TH.

10 A. M.

Call to order by President.

Address of Welcome, J. E. Aubrey, Denison, Texas.

Response, J. A. Lopeman, Enid, Okla.

President's Address, W. C. Griffing, Port Arthur, Texas.

Report of Secretary-Treasurer, L. J. Tackett, Fort Worth, Texas.

Is it Worth While to Build a Southwestern Nurserymen's Association, W. A. Wagner, Durant, Oklahoma.

The Nursery Business During the War and After, J. R. Mayhew, Waxahachie, Texas.

2 P. M.

Appointment of Committees.

The 1918 Drouth and Its Effect Upon the Present Season's Business, John S. Kerr, Sherman, Texas.

Discussion led by John L. Foster, Denton, Texas.

Effect of the Government's Classification of Non-Essential Industries, J. B. Baker, Ft. Worth, Texas.

The Labb Situation, W. B. Munson, Denison, Texas.

Discussion.

WEDNESDAY, SEPTEMBER 25TH.

10 A. M.

The Question Box - 30 Minutes

The Nurseryman's Service to the World, Jim Parker, Tecumseh, Okla.

Present Prices of Nursery Stock Compared to other Commodities, H. E. Hall, Sherman, Texas.

Report of Committees.

Election of Officers.

Selection of place of meeting for 1918.

Adjournment.

One of the most enjoyable features was a dinner given to the visiting nurserymen by the Denison Commercial Club, when speeches were made by members of the club.

The guest of honor was Mrs. T. V. Munson, (wife of the late distinguished T. V. Munson) who was accom-

panied by her son and daughter, Will B. Munson, and Mrs. Chapman.

At the closing session the following resolution was adopted:—

Resolved: That we look with disfavor on a certain character of contract being used by certain nurserymen operating in the southwest during the present season, said contract calling for a number of unknown varieties of trees, together with a three years service in spraying, pruning, etc., and here and now petition that the State Nursery inspectors of the States comprising the Southwestern Association, to take such action as necessary for the protection of the planters and legitimate nursery interests from unethical influence of such contracts within this territory.

Election of officers resulted as follows:—President W. A. Wagner, Durant, Okla. Vice President, J. M. Ramsey, Austin, Texas. Secretary-Treasurer, L. J. Tackett, Ft. Worth, Texas. Executive Committeemen, W. C. Griffing, Port Arthur, Texas, and H. E. Hall, Sherman, Texas.

The constitution and By-Laws were amended calling for the annual meeting to be held on first Wednesday of September instead of first Tuesday.

Denison, Texas, was selected as the meeting place for the 1919 convention.

Those present were:—

W. C. Griffing, Port Arthur.

J. M. Ramsey, Austin.

E. Farley, Denison.

Will B. Munson, Denison.

J. B. Baker, Ft. Worth.

Sam. B. Ross, Durant, Okla.

A. S. Allen, Pottsboro, Tex.

John L. Foster, Denton.

E. W. Henderson, Athens, Tex.

W. A. Wagner, Durant, Okla.

C. F. Hoffman, Denton, Texas.

C. E. Stephens, Denison, Tex.

John S. Kerr, Sherman, Tex.

W. J. Brown, Dallas, Tex.

J. T. Foote, Durant, Okla.

J. R. Mayhew, Waxahachie, Tex.

E. P. Bernardin, Parsons, Kan.

J. E. Aubrey, Denison, Tex.

H. E. Hall, Sherman, Tex.

N. D. Zuber, Houston, Tex.

M. G. Black, Mt. Pleasant, Tex.

H. B. Chase, Chase, Ala.

N. J. Carpenter, Sherman, Tex.

J. L. Downing, Wichita Falls, Texas.

N. M. Shive, Cabot, Ark.

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by

THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

Advertising rates will be sent upon application. Advertisements
should reach this office by the 20th of the month previous to the date
of issue.

Payment in advance required for foreign advertisements. Drafts
on New York or postal orders, instead of checks, are requested by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., November 1918

Subscribers to "Nurserymen's Fund for Market Development"

THE OLD ORDER CHANGETH

On another page we print in full a
proposed revision of the regulations
governing the importation of nurs-
ery stock.

There are few nurserymen who have been reading the
trade journals and attending conventions that have not
been satisfied in their own minds that sooner or later
practically all imports of plants from foreign countries
would be stopped.

The war put a stop to most of the importing and it
looks very much as if it would not be resumed, especially
with plants that are shipped with a ball of earth.

For the time being it may be possible to import fruit
stocks, as these appear to be considered essential to the
fruit industry, but it is well not to overlook the fact that
the U. S. D. of A. is carrying on extensive investigation
of the possibility of raising suitable stocks in this coun-
try.

The final outcome is hardly in doubt and it is only a
question of time when all imports of plants will be
stopped.

Without questioning the wisdom which is bringing
these changes about, it is well to recognize the fact that
the United States will have to depend entirely on what
she can raise within her own borders, and it is largely up
to the nurserymen, florists, yes and amateur plant en-
thusiasts and others, as to how much beauty and inter-
est our gardens are going to lose until such times as
American Horticulture finds itself.

No one with a wide knowledge of the cultivated plants
of the world doubts the potential possibility of America
being equal to any country in the world in developing
her own horticultural beauty. There are, however, three
essentials:

1. Climate and soil, which we have.
 2. Skilled workmen or experts which have to be
trained.
 3. A demand or market which has to be developed.
- The two last essentials are somewhat interdependant,
as one produces the other.

It can be safely assumed that the American public
wants the best, there will be no limit to the consumption
but the public has to be shown, or the demand will only
be for what is available. A bunch of cosmos will satisfy,
if the public does not know anything about a bunch of
roses or orchids, or a group of flowering shrubs will pass
on the lawn until it is possible to get a group of Rhododen-
drons and the common kind of Rhododendron will do
until the choicer hybrids are available.

It is up to the profession to take the initiative and de-
velop and interpret the beauties of the plant world to
the American public.

Heretofore we have largely been dependent on the ini-
tiative of the florists, gardeners and nurserymen of the
old country for much of our garden beauty and have
largely copied the fads, fashions and styles in landscape
gardening. The time has come to pay more attention to
our own flora and develop our own possibilities and
ideals.

A GOOD SELECTION The appointment of Mr. J. Horace Mc-
Farland president of the American Civic
Association as one of the five members
of commission on living conditions of
war workers, shows the government is fully alive to the
need of pleasant surroundings if maximum results are to
be secured from working people.

Mr. McFarland's familiarity with the nursery business
can be depended upon to bring good results as no one
realizes better than he, that the outside of the house, or
grounds are as important as the inside where health and
happiness are concerned.

WHY NOT DEFER THE HEARING? The conference called by the Fed-
eral Horticultural Board to consider
a revision of the regulations govern-
ing the nursery stock, plant and
seed exclusion, which was to have been held
October 18, 1918, has been cancelled on account of
the extraordinary epidemic, and nurserymen are re-
quested to present their criticisms or suggestions in
writing.

Outside of the epidemic, it is an ill considered time to
hold such a conference, and hardly fair to the nursery-
men. It is in the midst of the Fall shipping season, and
at a time when nurserymen are almost entirely out of
labor or help of any kind, making it practically impos-
sible for them to attend or to give any consideration
whatever to the matter.

The proposed revision is of such grave importance to
the nurserymen the Horticultural Board should give
them every opportunity possible to present their side of
the case, which they hardly have at this time of the year,
and under the present conditions.

The immediate need to put a ban on all imports of

plants with a ball of earth is not obvious.

Nurserymen and florists along with many other trades have been subordinating everything in connection with their business to the needs of the country at war.

To rush such a measure through, that will so vitally affect their business, is to say the least not very considerate of the interests of the trade.

The Federal Horticultural Board would do much towards gaining the confidence of the trade if the matter were deferred until conditions become normal or at least delay it six or eight weeks, which could easily be done without seriously endangering the plant life of the country.



Private Lewis P. Bates, Co. M, 20th Inf. Camp Funston, Kans. Mr. Bates is one of the proprietors of the Floral Nurseries, Floral, Kans.

J. HORACE MCFARLAND ENTERING WAR WORK

To become one of the five members of a commission on living conditions of war workers, is the signal honor bestowed on J. Horace McFarland, Harrisburg, Pa., president of the American Civic Association, and known throughout the nation as a prominent and active worker in improving civic conditions.

The body, of which Mr. McFarland becomes a member, is expected by Federal officials to "speed-up" the production of war necessities in many plants now producing supplies for the government. More than a quarter of a million men will be affected by the work of the new com-

mission, which will work hand in hand with the commission selected by the Army and Navy Departments to provide proper housing facilities throughout the nation to aid the war producing portions of the Government.

President of the American Civic Association since 1904, Mr. McFarland, goes to the commission with a full acquaintance of living conditions throughout the nation, as a result of the conclusions and investigations reached by that association.

The activities of the new body, the Commission on Living Conditions of War Workers, will center in Washington, in order that it may co-ordinate with various commissions of the government, active in and aiding the prosecution of the war.

The particular subjects with which it will deal will be education, recreation, public utilities, public safety, health, and sanitation.

MID-WESTERN HORTICULTURAL EXPOSITION

The Mid-Western Horticultural Exposition will be held in Des Moines, Iowa, November 5th to 8th inclusive.

The following is a preliminary program as outlined by "Successful Farming" promotion bureau.

PRELIMINARY PROGRAM HORTICULTURAL DEVELOPMENT CONFERENCE

Participated in by Manufacturers of Spraying Machinery and Fruit Growers Supplies, Nurserymen, State and National Horticultural Extension Workers, Advertising men and the Staffs of Successful Farming.

Friday, November 8, 1918.

FORENOON SESSION—9 A. M.

Promotional and Educational work to increase spraying and proper care of Orchards.

General Discussion. Opened by Prof. R. S. Herrick, Horticultural Extension Division, Iowa Agricultural College. H. H. Hardie, Hardie Mfg. Co., Hudson, Mich.

LUNCHEON—12.30 P. M.

Successful Farming Building

AFTERNOON SESSION—2 P. M.

The Benefits of Co-operation between Nurserymen, Manufacturers and State and Federal Horticultural Extension Workers.

General Discussion by College Representatives from 13 Middle West States and by Nurserymen and Manufacturers.

Opened by Prof. S. A. Beech, Chief Horticulture & Forestry, Iowa Agricultural College.

E. H. Favor, Extension Horticulturist, Hayes Pump & Planter Co., Galva, Illinois.

EVENING PROGRAM AND DINNER—6.30 P. M.

Chamber of Commerce Dining Salon

Organized National Propaganda to increase the planting and production of Fruit.

General Discussion. Opened by H. J. McFarland, Pres. McFarland Publicity Service, Harrisburg, Pa. E. S. Welch, Pres. Mt. Arbor Nurseries, Shenandoah, Iowa.

F. J. Wright, Promotion Bureau, Successful Farming.

Nursery Work for the Disabled Man

By Gilbert I. Stodola.

Furnished to the National Nurseryman, Flourtown, Pennsylvania, by the Publicity Department of the Red Cross Institute for Crippled and Disabled Men, 311 Fourth Avenue, New York City.

CHARLES R. BARNES, Editor Department of Public Education

ONE of the many problems which we are already being called upon to solve, as a result of the great world war, is that of helping those of our soldiers who come back disabled, and unable to return to their previous vocations on that account. It is needless to say that the most we can do for these men, who have offered their all for us, is little enough in return for the sacrifices they have made. According to the Vocational Rehabilitation Act recently enacted by Congress those disabled in the military and naval forces of the United

States in characteristically efficient fashion and in various parts of the country has established reconstruction hospitals. There are, in connection with these, classes in different trades and crafts, including agriculture, horticulture and related lines. Thus, after the disabled man is restored to health, he is trained in some useful occupation and when he is proficient employment is found for him.

Some years ago a settlement camp at which I was spending the summer employed a young man of about



Back from France minus an arm, and being "re-educated" as a gardener while he waits for the new arm which will be provided for his rehabilitation.

States have been placed under the joint authority of the Surgeon General of the Army and the Federal Board for Vocational Education. The Surgeon General has jurisdiction from the time the person is injured until he is restored to good physical condition, when he receives his honorable discharge from the service. The Federal Board then offers his vocational re-education and training which will enable him to return to useful active employment and the U. S. Employment Service co-operates in finding him a job.

The War Department has already attacked the prob-

lem in characteristically efficient fashion and in various parts of the country has established reconstruction hospitals. There are, in connection with these, classes in different trades and crafts, including agriculture, horticulture and related lines. Thus, after the disabled man is restored to health, he is trained in some useful occupation and when he is proficient employment is found for him.

Some years ago a settlement camp at which I was spending the summer employed a young man of about twenty-two as a cook, who, I noticed, limped a bit. Otherwise he seemed to get about without difficulty and apparently performed his duties satisfactorily. I was astonished, therefore, to learn later that he had lost both his legs above the knee and was dependent upon artificial limbs.

It is wonderful how nature adapts itself to changed conditions. This is strikingly shown in the way in which a man who has lost an arm or leg, or other part, will acquire the ability to use his remaining facilities so efficiently that, he becomes for practical purposes almost as

useful as the normal man. Moreover, in devising ways to overcome his handicap his inventiveness is quickened and his mind acquires a surprising alertness and adaptability.

There is no doubt that in many branches of nursery work a crippled man can make good. A man who has lost one or both legs can, with proper training and in a comparatively short time, learn to perform the various duties connected with such work as pruning, making cuttings, setting plants, layering, grafting, etc., as efficiently as can his more fortunate brother.

The French have done wonderful things in helping the mutilé, as they call him, to perform the diverse activities connected with nursery work. For instance, they have devised an artificial work arm which enables a man who has lost his lower arm to perform as delicate a piece of work as grafting stock, the good arm and hand being used to operate the grafting knife. Again, they have invented other devices for heavier work, by the use of which a man can hoe, rake and dig.

It has been demonstrated that the loss of one or both legs does not prevent a man from becoming an efficient stenographer, accountant, office man or executive and a man, even if he be badly crippled, may, if he possesses talent in that direction, be trained to become a highly satisfactory salesman. Then too, there are openings connected with the work of landscape gardening, architecture, and the general laying of the grounds, as well as in supervising other works, for the handicapped man who is well trained.

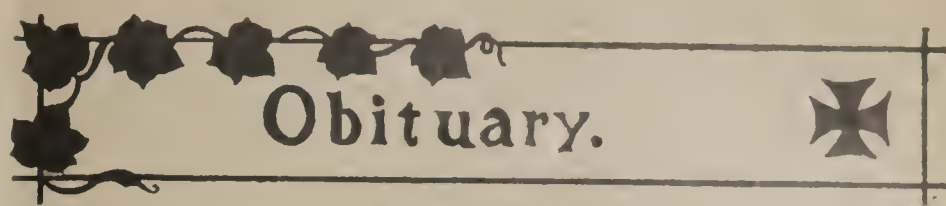
It is worth bearing in mind that it takes great will power, perseverance and patience for a crippled man to overcome his handicap.

Moreover, in the course of his re-education the qualities just enumerated become developed to a high degree and their possession considerably increases the value of the man as a worker. Then too the man who has had the pluck and stick-to-it-iveness to re-educate himself is not likely to be swayed by every passing impulse. When he has a job he wants to make good and when he has made good and is getting along satisfactorily he is not likely to make a change because of some slight inducement offered him elsewhere in the way of salary. This is all the more true because, through the very nature of his condition, his opportunities are limited.

Thus the nurseryman has an opportunity to render a highly humane and patriotic service and at the same time secure loyal and efficient workers. The last consideration is of special interest in view of the present acute shortage of skilled and unskilled labor. To accomplish the result the exercise of some patience may be necessary, accompanied by sympathy and understanding, both on the part of the employer and that of the fellow-worker of the re-educated man, but the effort will be well repaid. As the matter has aptly been put, what the disabled soldier wants is "not charity, but a chance."

IMPORT OF AMERICAN APPLES PROHIBITED

Mr. J. A. Jensen, Minister for Customs, announced on 11th July that it had been decided to prohibit for this year the importation of apples into Australia. Last year the importation of 53,000 cases of apples from America and Canada was permitted.—*Australian International Nurseryman*.



Obituary.

A. M. GRIMES

A. M. Grimes, of the Bureau of Markets, died at Presque Isle, Maine, Oct. 18th, of pneumonia, following an attack of Spanish Influenza. The news of Mr. Grimes' death was a great shock to his many friends in the Bureau and among the produce trade.

Arthur M. Grimes was born at Baltimore, Md., April 23, 1893. He graduated from Cornell University in June 1915 with the degree of Bachelor of Science. From 1915 to May 1916 he was employed as a citrus canker inspector in Dade County, Florida, leaving this work to engage in the grape propropagation investigations of the Bureau of Plant Industry, U. S. Department of Agriculture. September 1, 1917, he was transferred to the Bureau of Markets, and since that time has been engaged in investigating and demonstrating methods of transporting potatoes and Eastern grapes. He was co-author, with H. S. Bird, of the Bureau of Markets bulletin entitled, "Loading American Grapes," issued last August, and of the Bureau's bulletin entitled, "Lining and Loading Potato Cars," which has recently come from the press.

Mr. Grimes was a young man of unusual ability and promise, and one who commanded the respect of all with whom he came in contact. His training and wide knowledge of transportation conditions qualified him in an exceptional manner for the important work in which he was engaged. His death is a severe loss to the Bureau of Markets and to the fruit and vegetable industries.

RALPH M. WARD.

Ralph M. Ward, founder and owner of the firm of Ralph M. Ward & Co., New York City, importers and exporters, and specializing in lily bulbs, died at Roosevelt Hospital, New York, at 10.30 a. m. on Thursday, October 17, of pneumonia, following a brief illness.

He was born towards the end of August, 1880, in Marshalltown, Iowa, and was the son of Charles and the late Cora A. Ward.

Mr. Ward was known all over the country through the unique advertisements written by himself for the trade papers. A great many of them show the keen humor and kindness of the man, together with a very real insight into human nature. It was, in fact, at least partly through the magnetic quality of these advertisements that the reputation of Horseshoe Brand Lily bulbs was established and made known wherever there was a commercial florist.

STEPHEN McCaULEY

Stephen McCauley, Superintendent of the C. W. Stuart & Co. Nursery, Newark, New York, died October 18th from result of injuries received when he was accidentally struck by an automobile.

Mr. McCauley was 82 years old and was one of Newark's earliest residents. He came to this country from Ireland when a lad of fourteen, alone, and practically penniless. He went to work and when about eighteen

came to Newark, where he became employed in a nursery company, which had just been established here. To this business he devoted the rest of his life, and the remarkable knowledge he possessed of shrubs and all growing things has made him famous in the business world, as "the grand old nurseryman." Ever since its establishment he has been superintendent of the C. W. Stuart Nursery Company, and his services, the like of which would be hard to duplicate anywhere in this State, have been invaluable to that Company.

EARL H. WIGHTMAN

We regret to report the death of Earl H. Wightman, Secretary-Treasurer of the Chico Nursery Company, Chico, California.

Mr. Wightman died October 10th in his forty-sixth year.

JOSEPH LUNEMAN.

Known to many florists and nurserymen in the United States and in Europe, died October 3rd on a farm only a few miles from here in Gwynedd Township, Montgomery County, Pa. Up till a year ago Mr. Luneman represented the firm of Kallen and Luneman, of Boskoop, Holland, selling their products in the United States. After this country's entry into the war he decided to settle down and fill a position with a nursery, and he came to my establishment and stayed till last fall, when Mr. George C. Thomas, rosarian and author of Rose Books, asked me to let Mr. Luneman come to his place and look after and care for his great collection of roses, he having joined the U. S. aviation service, and Mr. Luneman was thus again nicely placed till the past spring when he went on a farm with another young man to grow eatables and thus help the good cause of helping our government. He was very industrious and ambitious and during the past months labored hard, too hard, for his health had not been very good of late and together with the many disappointments he experienced trying to make the farm a success, his strength rapidly failed him and he passed out October 2nd, at 3 a. m. He comes from a fine and prominent family, his father being a member of the firm of Kallen and Luneman, and it will be the saddest news for them to learn of this their son's loss. I am sure the sympathy of all who know him either in America or abroad will go out to his parents and relatives. Yesterday morning, October 5th, the few of us who knew him accompanied his remains to the neat little Catholic cemetery near Lansdale, Pa., where with the celebration of Mass he was laid to rest.

Joseph Luneman was one clean likeable young man, he just naturally endeared himself to everyone with whom he came in contact with and we miss him as we would a brother. May God who in His wisdom saw fit to call him to fields above while he was away in a country far from home, may He also bring consolation and cheer to his parents and those he called his own in Holland.

Respectfully and sincerely contributed by

ADOLF MULLER, Norristown, Pa.
Norristown, Pa., October 5, 1918.

CARE FOR OUR BOYS

By Alva Agee, Secretary of Agriculture for New Jersey

Within a short time nearly two millions of our boys have passed through the training camps and are winning the applause and love of our Allies, who have been fighting the battle of civilization for four years. Another million are preparing to follow. The duty is accepted as a matter of course because above every other consideration said to control our people lies a love of freedom and the square deal. War taxes are paid cheerfully to provide food and clothing and ships and munitions for this wonderful army our boys have formed. But there are personal services they need which no government could supply and the men and women of America who remain at home doing essential work have seized the opportunity of rendering these services through such organizations as the Red Cross, the Y. M. C. A., and other organizations. Abundant service along these lines cannot compare with that rendered by the boys who offer their lives in the interest of freedom and humanity, but it is the best that we can do, and it means that we have some part in the great undertaking. We pay our taxes and send our young men partly as a matter of duty, but we give to the funds that make life bearable for them in the army abroad and at home hardly with a thought of duty but rather in the spirit that we protect and help the members of our own families. It is a chance to sacrifice personally in some degree.

In the beginning of the war the calls of the various organizations were a bit confusing, as we did not understand relative values. Our trusted leaders in all these endeavors are in agreement upon the relative amounts of our contributions that each may use to the best advantage of our boys, and that is the only consideration that is worth while. Surely President Wilson was wise in suggesting that such agreement be reached, so that a single contribution could be made in bulk, knowing that each efficient organization would receive its due share. There will be liberal giving because the heart of every right-minded person is in this work of caring for our boys. Each one will give according to his ability to make sacrifice in the most awful time in the world's history. He will give, not because he belongs to one class of workers or another, or because he may or may not have members of his family at the front, but only in the desire to leave nothing undone that he can well do to make his own contribution to humanity adequate when suffering is beyond all estimate.

Show your soldiers they're not forgotten at home. Subscribe to the United War Work Campaign, November 11-18.

The Campaign for \$170,500,000 is approved by the government. Get in and help.

Notes from Arnold Arboretum

One of the most brilliant of all trees in autumn here is the Liquidamber or Sweet Gum (*Liquidambar Stryaciflua*). This eastern American tree grows as far north as southern Connecticut and in the south, especially in the maritime region of the southern Atlantic states, and in the lower Mississippi valley it is one of the commonest of the trees of the forests on the bottom-lands of rivers where it sometimes grows to the height of more than one hundred and fifty feet. It is a tree with a tall straight trunk and short branches which form a narrow pyramidal head and are furnished for several years on their upper side with broad corky wings. The flowers and the fruit are not conspicuous, and the great beauty of this tree is found in its habit and in the leaves; these hang on long stalks and are generally rounded in outline with a square or slightly heart-shaped base and are deeply five- to seven-lobed, the lobes being acutely pointed. The leaves are thin and very lustrous on the upper surface and in autumn turn deep crimson. There is a species of Liquidamber in southwestern Asia which produces the Liquidamber of commerce, another in Central America, and two Chinese species. The two Chinese species are both growing in the Arboretum and there is a probability that one of these, *L. formosana*, will prove hardy here. This is the tree which produces much of the wood used for Chinese tea-boxes. There are several individuals of the American Liquidamber in the Arboretum, the two largest specimens being in the Witch Hazel group near the junction of the Meadow and Bussey Hill roads.

The Sour-wood or Sorrel-tree, *Oxydendrum arboreum*, is another American tree which is too rarely found in cultivation. It is the only representative of the genus which belongs to the Heath Family, and in favorable surroundings on the Appalachian Mountains sometimes becomes fifty or sixty feet tall. It is, however, much smaller in cultivation at the north and begins to flower when only a few feet high. This tree owes its common name to the acid juices of the leaves which protect them from insects and this adds to its value. It is valuable, too, because the white flowers, erect on the drooping branches of large clusters terminal on axillary branches of the year, do not appear until midsummer when few woody plants are in flower and because the leaves in autumn turn bright scarlet in striking contrast to the clusters of white, dry, pointed, capsular fruits. This southern tree is perfectly hardy in New England where it should be more generally planted. There is a group of the Sour-wood among the Laurels at the base of Hemlock Hill.

Better known in this part of the country than the Liquidamber and the Sorrel-tree, the Flowering Dogwood (*Cornus florida*) might well be planted more generally than it has been, for there is no more beautiful inhabitant of the woods of eastern North America. The inflorescence, with its pure white floral bracts which ap-

pear before the leaves unfold, light up the forests in early spring and in the autumn when the clusters of shining scarlet fruits are ripe and the leaves have turned scarlet no other small tree is more beautiful here.

The leaves of the Scarlet Oak (*Quercus coccinea*) are still green, or are only just beginning to turn, but in a short time this tree will be the most brilliant in color of all the Oaks which can be grown in this region. The Scarlet Oak is comparatively rare in the immediate neighborhood of Boston, but in Plymouth county it is, perhaps, the most common Oak tree, and the autumn splendor of the woods in which this tree abounds will well repay a late October visit to the Old Colony.

The leaves of no other shrub in the Arboretum are now so bright scarlet as those of the common Highbush Blueberry of New England swamps (*Vaccinium corymbosum*.) This plant has much to recommend it for general cultivation; the habit is good, the flowers are beautiful, the large bright blue fruits which cover the branches in early summer are very handsome and of better quality than those of any other Blueberry, and the autumn foliage is unsurpassed in brilliancy. Young plants can be easily transplanted from the swamps and succeed in any good garden soil in which they grow rapidly and flower and produce fruit in abundance.

Almost as brilliant here as the Highbush Blueberry are the Japanese species of *Enkianthus* which are established on the lower side of Azalea Path. The largest of these, *Enkianthus campanulatus*, is a tall narrow shrub with slender erect stems and drooping clusters of pale, Heath-like flowers. Like the other species its greatest beauty, however, is in the autumn when the leaves turn bright scarlet. This plant and *Enkianthus japonicus*, a much dwarfer species, are found in all Japanese gardens where they are grown for the colors of their autumn foliage. Although perfectly hardy and in every way satisfactory plants, the different species of *Enkianthus* are rarely found in American gardens.

One of the most interesting shrubs in the Arboretum in early autumn is the eastern Asiatic *Evonymus alatus* for, unlike those of any other plant in the collection, the leaves turn a clear rose color. This is a large, wide-spreading, rather compact shrub with branches furnished with broad corky ridges and inconspicuous flowers and fruits. Its fine habit and the unusual color of the leaves in autumn are its chief claims for attention. Unfortunately the leaves fall early and their period of beauty is short. There is a large plant in the *Evonymus* group on the right-hand side of the Meadow Road and another on the left-hand side of the Bussey Hill Road above the Lilaes.

Of the shrubs with leaves which turn orange and scarlet in the autumn the most conspicuous now is *Fothergilla major*. *Fothergilla* is a genus related to the Witch Hazels and is found only in the southeastern United States where four species have been distinguished; they

bear leaves which generally resemble those of the Witch Hazels and showy terminal heads of small white flowers which appear in the spring before the leaves. The largest and the handsomest of the species, *Fothergilla major*, sometimes grows to be ten or twelve feet high, and it is the tallest of the species which is cultivated here. This and the related *Fothergilla monticola* are mountain species and very hardy here. The other species are smaller plants from the southern coast region and require especial winter care.

Every one in New England interested in gardens knows the brilliant autumn colors of the Japanese *Berberis Thunbergii* which has been much planted here in recent years and is now an extremely popular garden shrub. Some other Asiatic Barberries, although still little known here, are equally beautiful at this season of the year. The dwarf form of *Berberis Thunbergii* (var. *microphylla*), of dwarfer habit and smaller leaves, which originated in the Arboretum several years ago, is an attractive little plant, and a Japanese variety of the species (var. *Maximowiczii*) is a larger plant than the type, with arching stems, larger leaves and larger flowers and fruits. In the autumn the color of the leaves is as beautiful as those of *Berberis Thunbergii*. But probably the handsomest of all the Barberries which are hardy in this climate is the Japanese *Berberis Regeliana*. This is a large shrub with the habit of the common Barberry, but the leaves are larger and more lustrous, the fragrant flowers are larger and of rather a paler shade of yellow, and the fruit is more brilliant; in the autumn the leaves turn orange and scarlet. This Barberry was among the first of the Japanese shrubs brought into American gardens as it was cultivated at the Parsons' Nursery on Long Island fully fifty years ago and was then known and distributed as *Berberis Hakodate*. It appears, however, to be still very rare in the United States and Europe. There is a large clump of this species among the Barberries on Hickory Path near Centre Street.

Another Japanese Barberry, *Berberis Sieboldii*, is well worth a place in every collection for the beauty of its deep dull red autumn foliage. This is a smaller shrub with erect stems forming a round-topped head, large flowers in few-flowered clusters, and large shining fruits.

There is now a large number of new Chinese species of Barberry in the Arboretum but the value of many of these as garden plants here is not known. Two Chinese species, *Berberis diaphana* and *B. dictyophylla* which were discovered a few years ago by French Missionaries who sent them to France whence they reached the Arboretum, are now known to be plants of exceptional value. *Berberis diaphana* is a low round shrub with solitary pale yellow flowers which are followed by large red fruits. The habit of this plant is unusual among Barberries and makes it valuable in small shrubberies. Its greatest

beauty, however, is in the autumn color of the leaves which is not surpassed in brilliancy by that of any other Barberry. *Berberis distyophylla* is a tall shrub with slender erect stems which form an open irregular head, small spiny leaves which are light green on the upper surface and silvery white below, large pale yellow flowers solitary or in pairs and red fruit. This shrub is attractive throughout the season and is particularly beautiful in the late autumn when the upper side of the leaves turns scarlet and the lower side retains its silver color, a condition which is found in a few other plants and is always attractive. These Barberries are established in the Shrub Collection and can be found in the supplementary Barberry collection on Hickory Path.

AMERICAN ASSOCIATION OF NURSERYMEN

President—J. R. Mayhew, Waxahachie, Texas.

Vice President—J. Edward Moon, Morrisville, Pa.

Treasurer—J. W. Hill, Des Moines, Iowa.

Secretary for the Association—Chas. M. Sizemore, Louisiana, Mo.

Executive Committee—C. R. Burr, Manchester, Conn.; C. C. Mayhew, Sherman, Tex.; J. B. Pilkington, Portland, Oregon; J. Edward Moon, Morrisville, Pa.; E. S. Welch, Shenandoah, Iowa.

WOMEN OF THE AMERICAN ASSOCIATION OF NURSERYMEN

President—Mrs. E. S. Welch, Shenandoah, Iowa.

Vice-President—Mrs. W. C. Reed, Vincennes, Ind.

Secretary—Mrs. E. R. Taylor, Topeka, Kansas.

Treasurer—Mrs. E. E. May, Shenandoah, Iowa.

STATE AND DISTRICT ASSOCIATIONS

American Nurserymen's Protective Association—President, Irving Rouse, Rochester, N. Y.; secretary, Thomas B. Meehan, Dresher, Pa. Meets annually in June.

American Retail Nurserymen's Protective Association—President, H. W. Marshall, Arlington, Nebraska; secretary, Guy A. Bryant, Princeton, Ill. Meets annually in June.

Association Oklahoma Nurserymen—President, P. W. Vaught, Holdenville, Okla.; secretary, Jim Parker, Tecumseh, Okla. Next meeting during week of State Fair at Oklahoma City, last of September or first of October.

California Association of Nurserymen—President, John S. Armstrong, Ontario. Secretary, H. W. Kruckeberg, Los Angeles, Cal.

Canadian Association of Nurserymen—President, E. D. Smith, Winona; secretary, C. C. R. Morden, Niagara Falls, Ont.

Connecticut Nurserymen's Association—President, Walter E. Campbell, New Haven, Conn.; secretary, F. L. Thomas, Manchester, Conn.

Idaho Nurserymen's Association—President, Anton Diedricksen, Payette, Idaho; secretary, J. F. Litooy, Boise, Idaho. No definite time has been set for next meeting. Probably in July at Boise, Idaho.

Illinois Nurserymen's Association—President, Guy A. Bryant, Princeton, Ill. Secretary, A. M. Augustine, Normal, Ill.

Massachusetts Nurserymen's Association—President, John Kirkegaard. Secretary, Winthrop H. Thurlow, West Newbury, Mass.

Mississippi Nurserymen's Association—President, Theodore Bechtel, Ocean Springs, Mississippi; Vice-President, S. W. Crowell, Roseacres, Mississippi; Sec'y-Treas., R. W. Harned, Agr. College.

National Association of Retail Nurserymen—President, E. S. Osborne, Rochester, N. Y.; secretary, F. E. Grover, Rochester, N. Y.

New England Nurserymen's Association—President, Harlan P. Kelsey, Salem, Mass.; Secretary, Charles Adams, Springfield, Mass. Annual meeting held on the last Tuesday in February.

New Jersey Association of Nurserymen—President, Carl H. Flemer, Springfield, N. J. Secretary-Treas., A. F. Meisky, Elizabeth, N. J.

New York State Nurserymen's Association—President, E. S. Osborne, Rochester, N. Y.; secretary, H. B. Phillips, Rochester, New York. Next meeting September. Probably at Utica.

Ohio Nurserymen's Association—President, T. J. Dinsmore, Troy, Ohio.; secretary, W. B. Cole, Painesville, Ohio.

Oregon—Washington Association of Nurserymen—President, C. F. Breilhaup, Richland, Wash.; secretary, C. A. Tonneson, Tacoma, Wash.

Pacific Coast Association of Nurserymen—President S. C. Miller, Milton, Oregon; secretary-treasurer, C. A. Tonneson, Tacoma, Wash. Place of next meeting to be decided later.

Pennsylvania Nurserymen's Association—President, Adolf Muller, Norristown, Pa. Secretary, Henry T. Moon, Morrisville, Pa.

Southern Nurserymen's Association—President, O. W. Fraser, Birmingham, Ala.; Vice-president, H. C. Caldwell, Atlanta, Ga.; Secretary and Treasurer, O. Joe Howard, Pomona, N. C. The next meeting is to be held in Birmingham the 21st and 22nd of August.

South Western Nurserymen's Association—President, W. A. Wagner, Durant, Okla. Vice Pres., J. M. Ramsey, Austin, Texas. Secretary-Treasurer, L. J. Tackett, Fort Worth, Texas. The next meeting will be held in Dennison, Texas, First Wednesday in September.

Tennessee Nurserymen's Association—President, George W. Poague, Graysville, Tenn. Secretary-treasurer, G. M. Bentley, Knoxville, Tenn.

Tennessee State Florists' Association—President, Leon Geny, Nash-

ville, Tenn. Secretary-treasurer, G. M. Bentley, Knoxville, Tenn.
Texas Nurserymen's Association—President, William B. Munson, Denison, Texas; secretary-treasurer, J. M. Ramsey, Austin, Texas.
Western Association of Nurserymen—President, Lloyd C. Stark, Louisiana, Mo.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

NURSERY STOCK WILL BE SHORT

In gauging conditions that will maintain when peace is declared, especially those that will affect the nurseryman, it is well to keep in mind that while many have experienced losses in business and in other ways there have been large fortunes made by others, and what is more important, for four years the whole country has been saving to buy Liberty Bonds and War Stamps. In other words, individuals are richer because they have been denying themselves luxuries and pleasures.

When the necessity for this ceases it is to be expected that individuals will begin to spend money on themselves.

Deferred improvements around the home will be started, new buildings will begin to go up, deferred plantings of orchards, improvements to parks and so much work calling for the products of the nursery will be put into operation. It is more than likely next spring will see the nursery men at their wits end to supply the stock called for.

Little propagation has been going on due to lack of labor and other causes, and there has been very little lining out stock imported.

There is every indication that in two years from now there will not be near enough stock in the country to supply the demand.

Princeton Nurseries, Princeton, N. J., is presenting its products to the trade by a catalogue, just to hand, that to say the least is unusual.

The compiler and editor evidently eliminated from his thoughts all depressing fears of the future. As a trade catalogue issued in war times it is an edition de luxe. It is printed on Cameo Sepia in double tone brown ink.

Perhaps the best feature of all is the successful way in which it conveys to the reader, the quality and service that may be expected from the Princeton Nurseries.

A NEW POTATO DISEASE

Prof. J. G. Sanders recently discovered near Hazleton, Pa., what is supposed to be a new and very serious potato disease. The infection of the tuber takes place near or at the eye, and there is rapidly formed a warty growth similar to a piece of cauliflower. Soon the entire potato is covered and changed into a warty mass, which rapidly decays in the ground, leaving a malodorous pulpy mass similar to a decayed puff ball.

It is possible this disease is an extremely virulent form

of European potato wart disease, which is known in other parts of the country.

Hazleton and vicinity is a mining region, and it is possible the miners having been growing potatoes in their own gardens, saving their own infected seed and using infected ground year after year for the same crop which has given the disease an opportunity to develop in its worst form.

It points to the necessity of procuring clean, sound seed and a change of crops.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC.

Required by the ACT OF CONGRESS OF AUGUST 24th, 1912

Of the NATIONAL NURSERYMAN, published monthly at Hatboro, Pa., for October 1, 1918.

State of Pennsylvania.

County of Philadelphia.

Before me, a Notary Public, in and for the State and the county aforesaid, personally appeared Thomas B. Meehan, who, having been duly sworn according to law, deposes and says that he is the Business Manager of the NATIONAL NURSERYMAN, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation) etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24th, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse side of this form: to wit:

1. That the names and addresses of the publisher, editor, managing editor and business managers are:

Publisher—THE NATIONAL NURSERYMAN PUBLISHING CO., INC., Hatboro, Pa.

Editor,—ERNEST HEMMING, Flourtown, Pa.

Managing Editor,—None.

Business Manager—THOMAS B. MEEHAN, office, Dresher, Pa.

2. That the owners are:

Mrs. C. L. Yates, Rochester, N. Y.

Thomas B. Meehan, Dresher, Penna.

Albert F. Meehan, Dresher, Penna.

James McHutchison, Jersey City, N. J.

Penrose Robinson, Hatboro, Penna.

3. That the known bondholders, mortgagees and other security holders owning or holding 1 per cent. or more of total amount of bonds, mortgages, or other securities are: NONE.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustee, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

THOMAS B. MEEHAN, Business Manager.

Sworn to and subscribed before me this 7th day of October, 1918.

Elmer Miller, Notary Public.

(My commission expires March 11, 1921.)

J. H. Skinner & Co.

Topeka, - Kansas



Japan Pear Seedlings.

Russian Apricot Seedlings.

Forest Tree Seedlings—Catalpa, Maple, and Locust.

Fruit Trees—Apple, Cherry, Kieffer Pear, Peach and Plum.

Rhubarb, Divided Roots, True Myatt's Linneaus.

Grapes

Shade Trees

Flowering Shrubs

Paeonias

WANTED

WANTED—Experienced men for nursery work in field and packing departments. State experience, age and salary desired.

Fancher Creek Nurseries, Fresno, Cal.

Under the present conditions we find the mail is often delayed and we ask our patrons to please send advertising matter promptly to our office at Hatboro, Pa.

HORTICULTURE

A Magazine of Trade News and Cultural Information for the NURSEYMAN, FLORIST, SEEDSMAN and GARDENER. A reliable exponent of advanced Trade and Progressive Horticulture.

Published Weekly

SUBSCRIPTION \$1.00 PER YEAR

HORTICULTURE PUBLISHING CO.

147 Summer St. - Boston, Mass.

Kromhout & Sons, Boskoop, Holland GROWERS - - EXPORTERS

Have to offer for Spring 1919 Shipment

Boxwood—all shapes and sizes
Hardy Azaleas, Mollis, Hybrid Chinensis
Ghent Azaleas, Double-flowering Pontica
Rhododendrons, 1½ to 3 feet
Hardy Evergreens, Blue Spruces, etc.
Magnolias, Japanese Maples, in many varieties
Hydrangea pan. gr. fl. All kinds of climbing plants
Roses H. P., T., H. T., Polyantha and climbing
Young stock for lining out. Price list on demand

All correspondence to

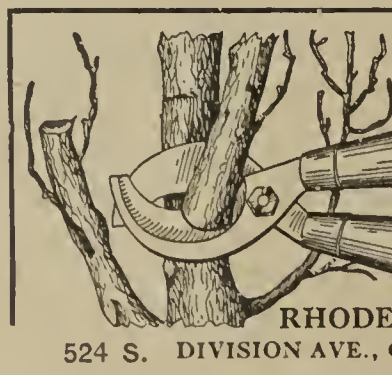
A. KROMHOUT - Thompsonville, Conn.



T. S. HUBBARD CO.

Fredonia, N. Y.

Growers of Grape Vines and Small Fruit Plants
For Garden and Vineyard Planting
Established 1866 Send for Catalogue



**RHODES DOUBLE CUT
PRUNING SHEAR**

Patented

RHODES MFG. CO.,
524 S. DIVISION AVE., GRAND RAPIDS, MICH.

THE only
pruner
made that cuts
from both sides of
the limb and does not
bruise the bark. Made in
all styles and sizes. All
shears delivered free
to your door.
Write for
circular and
prices.

When writing to Advertisers please mention the National Nurseryman.

ENGLISH NURSERY STOCK

GROWN IN LARGE QUANTITIES

RHODODENDRONS, a splendid lot this season, fine bushy plants. Plenty of the hardy Catawbiense named varieties suitable for the American climate including the newer and superior kinds, and well budded plants for forcing.

AZALEAS, ANDROMEDA, KALMIA and other American plants in great variety.

CONIFERS a large stock, of all hardy kinds.

HARDY ORNAMENTAL, EVERGREEN and DECIDUOUS TREES. These at right prices.

ROSES. Dwarfs, leading kinds.

MANETTI stock, fine 1 year, a limited quantity.

CLEMATIS AND CLIMBING PLANTS.

FRUIT TREES Espalier trained pyramids and bush fruits in quantity.

FRUIT TREE STOCKS, APPLE, PEAR, PLUMS, etc.

A general assortment of hardy outdoor stock. Glad to answer inquiries.

No Agents. Write direct for wholesale catalogue to

WALTER CHARLES SLOCOCK, Goldsworth Nurseries, Woking Surrey, England

Half an hour's rail from London & S. W. Ry., Main Southampton Line.

Glad to see visitors.

CHERRY TREES

We offer for sale our usual supply
of strictly first-class one year
and two year

CHERRIES

Send us a list of your wants

H. M. SIMPSON & SONS

Vincennes, - - - Indiana

AMERICAN FLORIST'S TRADE DIRECTORY

Price \$3.00, Postpaid

For Sale By

NATIONAL NURSERYMAN PUB. CO. Inc.,

HATBORO, - - - PA.



EVERY SATURDAY

Advertising Space, \$1.25 per Inch. Subscription, \$1.50 per Annum

Under this title we publish the most reliable, progressive and up-to-date trade paper in the country, with departments covering the Nursery, Florist, Seed Trade and Allied Industries. With a paid up subscription and distribution list of 10,000 copies, nearly every copy of which is to men in business for themselves the worth of our columns will be readily appreciated. The editor of our Nursery Department is and has been for years, JOSEPH MEEHAN, of Philadelphia.

For sample copy, discounts, etc., address

The Florists' Exchange, P. O. Box 100, Times Square Sta.

Especially High Grade Stock

NOW READY

1,000 Hydrangea panic. grandifl. 2 yr. old, 24-36 in

12,000 Ligustrum ovalifolium, 2 yr. old (very heavy)

3,000 Ligustrum ovalifolium, 3 yr. old (very heavy)

900 Syringa vulgaris, 2 yr. old, 24-36 in.

Populus.fastigiata, (Lombardy Poplar) 5-8 ft.

Koelreuteria paniculata, (Varnish Tree) 3-4 ft.

We have also a number of varieties of large, well-grown shrubs, such as Forsythia in varieties, Deutzia in varieties, Weigela, etc. Prices on application.

New Brunswick Nurseries

NEW BRUNSWICK, N. J.

ESTABLISHED 1893

THE NATIONAL NURSERYMAN

INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock.

Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed.

Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all leading nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock offered for sale.

SUBSCRIPTION PRICE \$1.50 per year in advance. FOREIGN SUBSCRIPTIONS \$2.00 per year in advance.

Advertising Rates on Application

THE NATIONAL NURSERYMAN PUBLISHING COMPANY Incorporated

Subscribers to "Nurserymen's Fund for Market Development."

Hatboro, Penna.

When writing to Advertisers please mention the National Nurseryman.

Bobbink & Atkins

Nurserymen and Florists

RUTHERFORD, NEW JERSEY

Palms and General Decorative Plants, **INSPECT**
Conifers, Shade and Ornamental Trees **INVITED**

ASK FOR WHOLESALE CATALOGUE

Subscribers to "Nurserymen's Fund for Market Development."

The

Established 1841

Gardeners' Chronicle

is the Leading Horticultural Journal in the World

SUBSCRIPTION IN U. S. A., \$4.20
YEARLY POST FREE

Specimen Copy and Catalogue of Horticultural Books post free
on application to the publisher----

The Publishers, 41 Wellington St.

Covent Garden,

LONDON, W. C.

Charles Detriche, Senior

ANGERS, FRANCE

Grower and Exporter of Fruit-Tree Stocks,
Forest Tree Seedlings, Rose Stocks, Shrubs,
Vines, and Conifers for Nursery Planting.

For all information as to Stocks, prices, terms, etc., address

Jackson & Perkins Co.

(SOLE AGENTS)

NEWARK, N. Y.

SCARFF'S NURSERY

Headquarters for

Small Fruit Plants

1200 Acres "At it 25 Years"

Strawberries
Raspberries
Blackberries
Dewberries
Berberry

Currants
Gooseberries
Grape Vines
Privet
Spirea

Rhubarb
Asparagus
Horseradish
Hardwood Cuttings
Butterfly Bush

100,000 transplanted Raspberry, Blackberry and Dewberry plants
for retail trade. See wholesale list before placing your order.

W. N. SCARFF & SONS

NEW CARLISLE

OHIO

We sell to THE TRADE only, and make a specialty of

OREGON CHAMPION GOOSEBERRY PERFECTION CURRANT CLEAN COAST GROWN SEEDLINGS

We also have growing for fall delivery a large assort-
ment of general nursery stock, including Fruit, Shade, and
Ornamental trees, Roses, Etc.

Head Quarters for Nursery Supplies.

Correspondence invited.

Portland Wholesale Nursery Co.

122½ Grand Avenue,

Portland, Oregon

A Large Stock of Apple, Pear, Cherry and Peach Grape Vines, Blackberry and Raspberry Plants

And a general line of ORNAMENTAL TREES
and SHRUBS. All stock clean and thrifty, the
best that can be grown.

T. B. WEST, Perry, Ohio.

W. T. HOOD & CO.

OLD DOMINION NURSERIES

RICHMOND

VIRGINIA

We offer for Fall 1918 and Spring 1919, general line of
Nursery Stock—California and Amoor River Privet, Norway
Maples, Oriental Planes, Evergreens, etc.

We will have a heavy stock of Peach Trees and Norway
Spruces on which we can quote attractive prices.

We expect to be in position to offer Natural Peach Seed,
crop of 1917. Send us your list for quotations.

W. FROMOW & SONS

Azalea mollis, Rustica and Ghent in all the leading varieties,
grown from layers not grafted.

Manetti Stocks clean and well rooted for grafting or open
ground.

Standard, Climbing, Weeping and Dwarf Roses in great variety.
Rhododendrons, the cream of the Hardy American varieties.

Andromeda floribunda, japonica, and speciosa, bushy budded
plants.

Kalmia latifolia.

Green and River's Purple Beech in all sizes up to 12 feet.

Prices and full particulars on application.

WINDLESHAM NURSERIES

Surrey,

England

ALL "AMERICAN NURSERYMEN"

Wishing to do business with Europe should send for the

"Horticultural Advertiser"

This is The British Trade Paper being read weekly by
all Horticultural traders. It is also taken by over 1000 of
the best Continental houses. Annual subscriptions to cover
cost of postage, \$1.00. Money orders payable at Lowd-
ham, Notts. As the H. A. is a purely trade medium appli-
cants should, with the subscription, send a copy of their
catalogue or other evidence that they belong to the nursery
or seed trades. Address

**Editors of the "H. A." LOWDHAM, NOTTS,
ENGLAND**

TREES

Largest assortment in New Eng-
land. Evergreens, deciduous trees,
both common and rarer varieties.

Sturdy, choice stock that can be
depended upon. Send for catalog
and special trade prices.

The Bay State Nurseries

North Abington
Mass.

SHRUBS

This New England soil and cli-
mate produce fine sturdy shrubs.
Special trade prices. By the thous-
ands, hardy Native and Hybrid Rho-
dodendrons—transplanted and accli-
mated. Send your lists let us est.

When writing to Advertisers please mention the National Nurseryman.

FRAMINGHAM QUALITY NURSERY STOCK

for

YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Now is the time to prepare for Fall business. Make us a visit during your vacation, inspect our stock and reserve what you require for Fall shipment.



NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER—We offer all or any part of an accumulation of long Nursery Bands one inch in width and sixty inches to one hundred and twenty inches in length, at a reduction of twenty dollars a ton. This offer holds good until stock is disposed of.

WRITE US

COVERING YOUR WANTS IN STEEL BANDS

American Steel Band Co.,

888 Progress Street,

ALLEGHENY, PA.

THE CHASE LABELS

For Nurserymen and Florists are Excelled by None

Plain, Painted, Wired with Tinned or Copper Wire and
PRINTED IN ANY MANNER that may be called for

*Prices as low as First-Class Work and Unequalled Promptness in
Delivery will justify.*

THE BENJAMIN CHASE CO.

P. O. Address, DERRY VILLAGE, N. H.

Western Union Telegraph, DERRY, N. H.

Subscribers to "Nurserymen's Fund for Market Development."

- Specialities in Shrubs -

GOLDEN ELDER,
WEIGELA EVA RATHKE,
RED FLOWERING DOGWOOD,
FORSYTHIA SUSPensa, true,
HYDRANGEA PANICULATA GRANDIFLORA,
SPIRAEA ANTHONY WATERER,
PERSIAN LILAC,
and shrubs in great variety.

THOMAS B. MEEHAN CO.

Wholesale Nurserymen

DRESHER,

PENNA.

Subscribers to "Nurserymen's Fund for Market Development."

...PEACH PITS...

New crop is offered, subject to supply, at \$3 per bushel of 50 pounds, sacked f. o. b. cars shipping point. We suggest that you lay in a supply for planting next fall.

J. Van LINDLEY NURSERY CO.

Pomona, N. C.

Subscribers to Market Development Fund.

Bamboo Cane Stakes

Natural 6- 9 ft., 600 per bale

" 9-12 ft., 400 " "

Write for prices

McHutchison & Co., 95 Chambers St., N. Y.

Harrisons' Barberry

Thunbergii

The plants we have to offer are up to our usual high standard, well-branched, bushy, with an abundance of fibrous roots,—the kind that will live and thrive.



5,000	6 to 12 inch
10,000	12 to 18 inch
10,000	18 to 24 inch
10,000	2 to 2½ ft.
5,000	2½ to 3½ ft.

If you are in need of a large quantity of Barberry it will pay you to visit our Nurseries. **WE INVITE INSPECTION.**

A complete list of our offerings will be sent promptly upon request.

HARRISONS' NURSERIES,
Berlin, J. G. Harrison & Sons Maryland

Subscribers to "Nurserymen's Fund for Market Development."



THE NATIONAL NURSERYMAN



DECEMBER 1918

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of

Apple, Cherry, Peach
Berberis, Spiraea Van
Houtte, Other Ornamentals
Shrubs, H. P. Roses, Etc.

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.

Monroe, Mich.

Subscribers to "Nurserymen's Fund for Market Development."

MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

Shenandoah, Iowa



Our Specialty

A large assortment of high quality Nursery
Stock for the Wholesale Trade.
Fruit Trees, Small Fruits, Ornamental Trees,
Shrubs, Roses, and Vines.

A FINE LOT OF

Elm, American White, all sizes

Wanted — Hansen Hybrid Plums and Compass

Ask for Trade Lists. Write us about your wants.

Subscribers to "Nurserymen's Fund for Market Development."

Progressive, Superb

and Peerless

...Everbearing...

Strawberry Plants

We can supply you fresh dug every
day. Healthy true-to-name, well root-
ed at attractive prices.

Address

The W. F. Allen Company

Salisbury, Maryland

TO THE TRADE :

We wish you a Merry Christmas and a
very Happy and Prosperous New Year



Our next Bulletin will be out
about Jan. 15th. Wait for it.



C. R. BURR & CO.

Manchester, Conn.

Subscribers to "Nurserymen's Fund for Market Development."

The
Preferred
Stock

CLEAR SAILING AHEAD

The
Preferred
Stock



Few nurserymen, we think, have failed to realize what the conclusion of peace will mean to their businesses. The good news which came over the wires on November 11th put joy into their hearts, not only that our country was to be freed from the burdens and horrors of war, but also that the dawn of a new era of prosperity was at hand. While nursery int rests have not suffered during the war in any such measure as some lines, yet ours is a peace-time business and we may assuredly expect that, when people have gotten back into their normal occupations, our products will command more of their attention.

Are you ready—or getting ready—for a heavy demand in the spring? If not, you are losing a golden opportunity. Some lines are very scarce even now and many others will be scarce before spring. Far-sighted nurserymen are anticipating the demand and are covering **now** on their probable wants, judging from the exceptionally heavy sales which we have made during the fall season just closed.

For Spring we are well stocked with a complete general assortment as well as in our usual specialties, such as:

Roses,

Flowering Shrubs

Clematis Paniculata

Clematis, large-flowering

Tree-Form Lilacs

Perennials

Paeonies

Ampelopsis

Shade Trees

Fruit Trees



If you are not already a customer of ours and receiving our literature regularly, please write and let us place your name on our mailing-list. Use printed stationery though, or enclose business card. We sell only to the trade. Our first winter "Bulletin" will be out the latter part of the month. May we send it to you?

JACKSON & PERKINS CO.,

Newark, New York

The
Preferred
Stock

Subscribers to Nurserymen's Fund for Market Development

The
Preferred
Stock

Further Testimony

Being Words of Wisdom spoken from Experience, Helpful Advice to the Uninitiated, and Kindly
Comment by a Buyer of Princeton Products.

A Letter :

"Your fall list, to whose arrival we have looked forward with great pleasure, has been received, and we are not disappointed. Both as a Wholesale Catalogue and as a work of art, it is about perfect. The very attractive pictures hardly do justice to the class of stock which we received from you in the two car-loads of last year.

"Our one adverse criticism of your list would be that it cannot show the quality of service and packing which you give. We marvel that you should be able to produce, in these times, such perfect stock and service at such reasonable prices.

"There is no doubt whatever that when the general run of retail nurserymen become acquainted with your stock, they will not have to think twice as to where to buy. First-class nurserymen as well as first-class retailers in any line, cannot afford to handle an inferior grade if they expect to keep up the good name of their organization. We are banking on the policy of "Quality and Service." We bend all our energies to give our customers nothing but the best of both; and we depend upon the wholesalers for exactly the same thing. "Your list is distinctive and has 'Class.' It represents truthfully the quality and service which you render, and which the people who have not received any stock from you would not know about in any other way.

"We know where to send our orders.

Very sincerely yours,

Westover Nursery Company,

By F. R. von Windegger, Treasurer.

Clayton, Missouri, October 15, 1918."

Having first obtained our correspondent's permission, we now use his letter in this way for the information of the trade, to whose thoughtful consideration it is recommended. The class of business done by Mr. von Windegger's company makes his comment on our stock especially appreciated by us.

Comment by us is unnecessary, except possibly to say that our complete assortment and efficient organization enable us to offer others the same satisfaction confessed by our correspondent. Our List referred to will be gladly sent to any nurseryman asking for it.

Princeton Nurseries, at Princeton, in New Jersey
GROWERS FOR NURSERYMEN ONLY

November 1.

When writing to Advertisers please mention the National Nurseryman.

PAINESVILLE NURSERIES

BIDDING FOR FALL BUSINESS

ORNAMENTALS

ASH
Cut-leaf Wpg. BIRCH
CATALPAS
CORNUS
ELMS
HORSE CHESTNUT
JUDAS

LINDENS
MAPLES
MULBERRIES
—Tea's Wpg. and Globosa
POPLARS
SALISBURIA
SYCAMORE
WILLOWS, Etc.

SMALL FRUITS

CURRANTS
GOOSEBERRIES
BLACKBERRIES, Etc.



FRUIT TREES

APPLES
PEARS
PLUMS, Etc.

SHRUBS and VINES

BUDDLEIA
CALYCANTHUS
CYDONIA
HYDRANGEAS
PRIVET
SPIREAS
WEIGELA
AMPELOPSIS
CLIMBING HSKLS, Etc.

ROSES

HARDY PERENNIALS

PEONIES, PHLOX, IRIS
and complete
General Assortment



* We will have no Dutch Bulbs this Fall; otherwise,
"BUSINESS AS USUAL."

Glad to handle your Want Lists.

THE STORRS & HARRISON CO.

NURSEYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

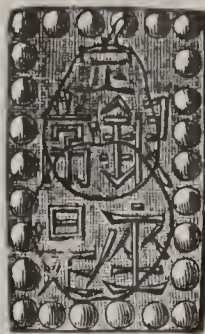
Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa

Subscribers to "Nurserymen's Fund for Market Development."

Heikes—Huntsville—Trees



Established 1872

1500 Acres

FRUIT TREES ROSES and other ORNAMENTALS

For the wholesale trade.
All of our own growing.

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

For Fall of 1918

Ornamentals, Shade Trees, Evergreens,
Perennials, Fruits, etc.

A large stock of the following:

Cherry Trees, 2 yr.
Apple Trees, 2 and 3 yr.
Peach Trees, 1 yr.
Norway Maple up to 2 inch.
Am. Elm, all sizes.

Write for special prices on car lots.

C. M. Hobbs & Sons
Bridgeport, - Indiana

Subscribers to "Nurserymen's Fund for Market Development."

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of Own Root Roses

ORNAMENTAL TREES SHRUBS
BERRIES CLEMATIS
EVERGREENS PEONIES PHLOX
and
HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY
GENEVA, N. Y.

70 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE



THE

North-Eastern Forestry Co.

CHESHIRE

...Connecticut...

We are now ready to quote lowest prices on
**FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS**

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities. Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries
Sparta, Ky.

For FUMIGATION With
HYDROCYANIC ACID GAS
"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

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This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

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Apple, French, Japan and Kieffer Pear, Myrobolan Plum and
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100 other varieties for nurserymen. All northern collected
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WRITE FOR PRICES

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Especially high grade stock now ready, 150,000 Cal. Privet,
3 years old cut back, 2-3 ft. with 5 to 10 branches, 3-4 and 4-5
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Budded roses, 2 year exceptionally strong. Hardy per-
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WESTMINSTER

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Offers for Fall, 1918:

10,000 Monacacy Apple, 2 yr., Buds.

250,000 Cal. Privets, 2 yr. and 3 yr.

500,000 Asparagus Asst., 2 and 3 yr.

Barberry Thun., 3 yr., extra fine.

Lombardy Poplars, 8 to 16 feet.

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Can supply the above in CAR lots.

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make low prices for early orders.

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OFFER for Fall 1918

GRAPE VINES—One and two years old. Varieties
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Also Scarlet or Crimson Clover Seed and Cow Peas.
Free from weed seeds, all recleaned and guaranteed first
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we can supply you with genuine PROGRESSIVE Everbearing
plants, guaranteed to be TRUE TO NAME and handled so as
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We have been growing and breeding the Everbearing straw-
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We invite a personal visit to our grounds during fruiting sea-
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is always out.

THE GARDNER NURSERY CO., Drawer 103, Osage, Iowa.

ESTABLISHED 1893

THE NATIONAL NURSERYMAN

INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock.

Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed.

Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all leading nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock offered for sale.

SUBSCRIPTION PRICE \$1.50 per year in advance. FOREIGN SUBSCRIPTIONS \$2.00 per year in advance.

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Subscribers to "Nurserymen's Fund for Market Development."

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Plants and service that pleases both you and your trade.

Let us quote you

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Apple Trees, Asparagus Roots, and
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Under this title we publish the most reliable, progressive and up-to-date trade paper in the country, with departments covering the Nursery, Florist, Seed Trade and Allied Industries. With a paid up subscription and distribution list of 10,000 copies, nearly every copy of which is to men in business for themselves the worth of our columns will be readily appreciated. The editor of our Nursery Department is and has been for years, JOSEPH MEEHAN, of Philadelphia.

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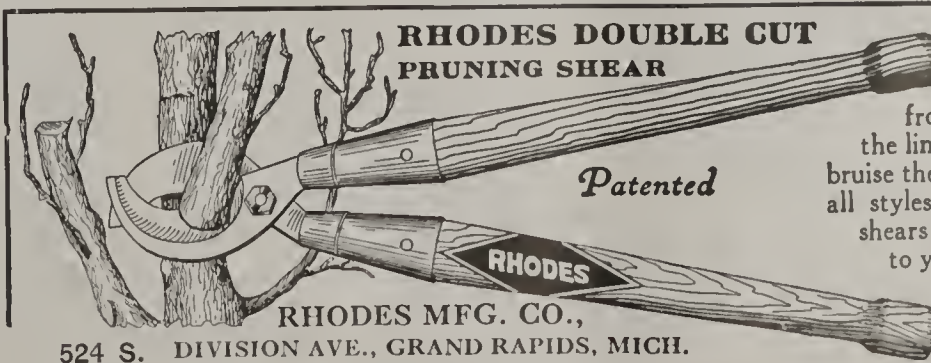
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Rhubarb, Divided Roots, True Myatt's Linneaus.

Grapes

Shade Trees

Flowering Shrubs

Paeonias

Transplanting Costs Money But It *Makes* Norway Maples

That's the sole reason why we give so much time and labor to cultivating and transplanting these trees—it's the only way to put *quality* in them, which is the main thing we work for.

The trees are well spaced, which makes for well-rounded tops, straight and heavy trunks which will caliper from 1 to 3½ inches, and a sturdy root-system.

There is no shortage of cars here, so we can ship in carlots to distant points; or by motor truck to places near New York City. Orders will be filled consecutively, so it will be to your advantage to contract early.



Swan River Nursery
Patchogue, N. Y.

Vincennes Nurseries, W. C. REED, Prop.
VINCENNES, - - INDIANA

We are pleased to offer for Fall or Spring:

CHERRY, 2 year X X 1 inch up, also ¾, ⅝ and lighter grades.

CHERRY, One year 1½ up, ⅝ & ½ to ⅝

Our Blocks of Cherry are largest to be found in U. S.

We bud annually 500,000 Cherry, they are making splendid growth.

Peach, One Year, all grades leading Varieties.

Plum, Japan and European, One and 2 year.

APPLE, 2 year, a few cars for late fall shipment.

Grafted Hardy Northern Pecans.

Car Lots a specialty, also fair assortment of Ornamentals.

Subscribers to "Nurserymen's Fund for Market Development."

You can save **Time and Money**

If you use our neatly packed

SHEET NURSERY BURLAP

Put up in bales

In various size sheets ranging in sizes from 24x24 to 40x40 in.

Write for particulars

Sarachan & Rosenthal

64-66 Hanover Street

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Hill's Evergreens

We are headquarters for Everything in the Evergreen line, and with few exceptions have our usual full supply, but some things are scarce and getting scarcer every day. Owing to lack of imports, demand is brisk, and shrewd Nurserymen are covering their requirements early.

Nurserymen—Send us your list of wants in young Evergreens for lining out. Also Deciduous Trees, Shrubs and Vines. Our Propagation Department is one of the largest and most complete in America, and feel sure we can save you money and give complete satisfaction.

Dealers—Let us take care of your wants in Windbreak, Hedge and Ornamental Evergreens. Send in your list for pricing now, while assortment is complete.

Fall 1918 Trade List ready



The D. HILL Nursery Co., Inc.

Evergreen Specialists

LARGEST GROWERS IN AMERICA

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The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERYSTOCK

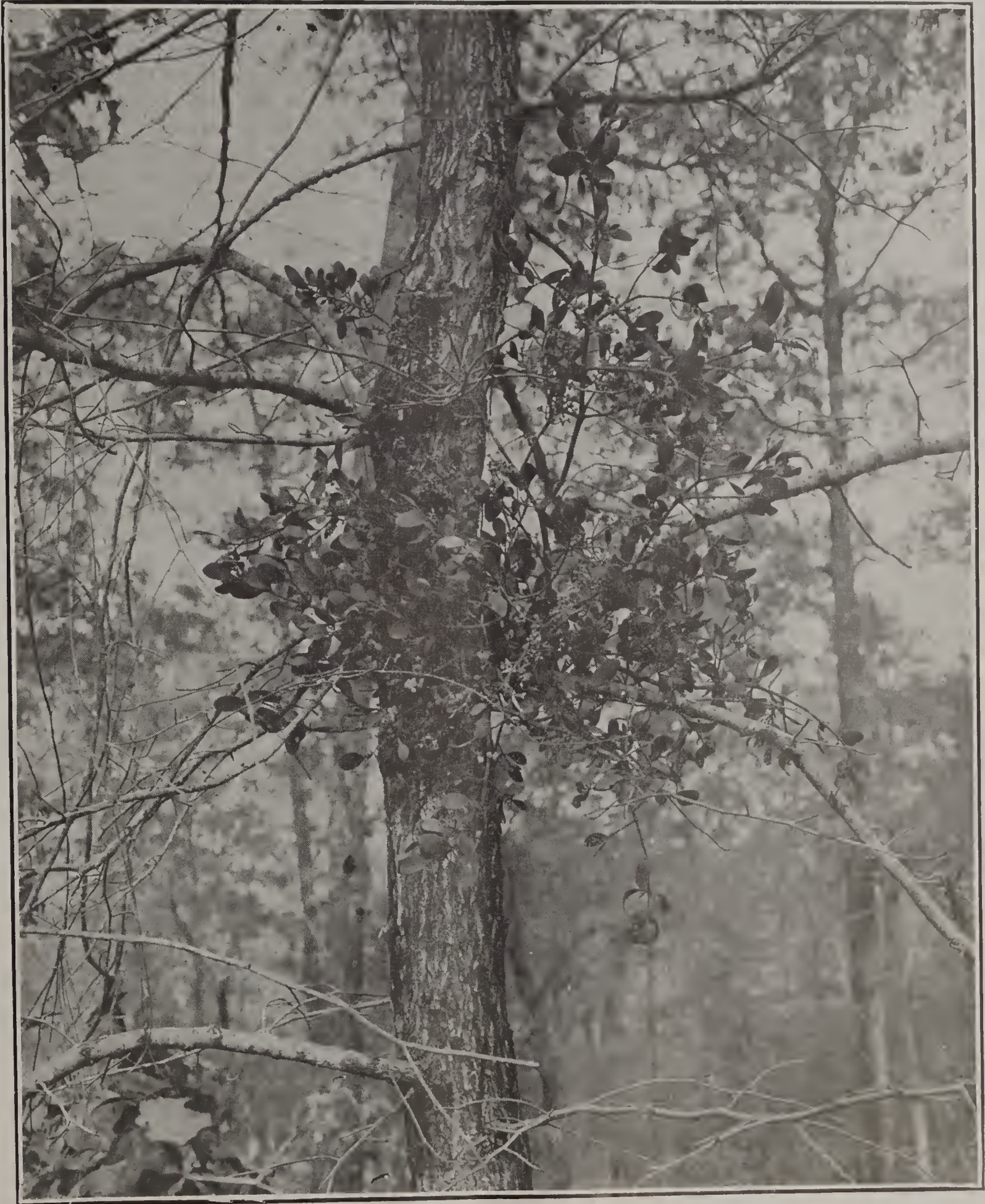
The National Nurseryman Publishing Co., Incorporated

Vol. XXVI.

HATBORO, PENNA. DECEMBER, 1918

No. 12

MISLETOE



American Mistletoe as seen growing in the South

MISLETOE

MISLETOE can hardly be said to hold a very important position in the horticultural world, as the *Phoradendrons*, the genus to which the Mistletoe belongs are not cultivated. The *Phoradendron flavescens*, American Mistletoe, is so closely associated with Christmas, we offer no apology for featuring it in our December number.

Our illustration is an excellent specimen growing *in situ*, and we feel very sure that the photographer had to do some high climbing to take the picture.

It is a parasitic plant growing on various trees through the Southern States, New Jersey being its Northern limit. It does not seem to be at all particular as to its choice of host, as it may be found growing on almost any kind of tree in the South. The bulk of Mistletoe shipped to the Northern markets for Christmas comes from New Mexico and Oklahoma.

In the more populated parts of Virginia and North Carolina, the traveler does not see great quantities of it but rather an occasional plant in the high trees in the woods. Like the Holly, Rhododendron and other plants for which there is a demand it is gradually disappearing. Economically it would be naturally classed with the pests

being detrimental to more valuable plants upon which it lives.

Like all unusual forms of plant life it has an attraction all its own, apart from the sentimental associations attached to it, and who knows but in the distant future some visionary horticulturist may develop its possibilities as an ornamental subject.

The only time the writer ever saw the Mistletoe under cultivation was at Veitch Nursery, London, where they had a number of apple trees in tubs with fine branches of the old Country Mistletoe. *Viscum flavescens* growing on them, and for which was asked a fancy price.

There is no doubt that some rich young men would be willing to pay any price for the opportunity to sit under a bough of real living mistletoe with some particular girl.

It is interesting to note that many Old Country plants have their prototypes in the new world of which the Mistletoe and Holly are good examples. Most students agree that in the geologic past they were identical, and had one common origin.

If one even tries to imagine the lapse of time that must have gone by since the continents of Europe and America were joined it is surprising how little such plants have changed through the ages.

THE SKILLED EMPLOYEE

The skilled employee, who is contented and will stick, is as valuable an asset as a nursery business can possibly have.

It would be worth while for employers to study the subject from the employee's angle to see if it is not in the realm of possibilities to create those conditions that would produce more loyal and faithful service.

The troubles, difficulties, and problems of the master nurseryman may be heard at any of the conventions, and other places where nurserymen meet but the voice of the apprentice and craftsman is silent except on rare occasions.

There are many reasons advanced why more and a better grade of young men do not follow the nursery business for a livelihood such as low wages, long hours, not enough excitement, lack of opportunity for advancement, etc., all of which perhaps are partial reasons, but which will not stand if compared with other lines of occupation.

In reality the profession of horticulture, with its many branches, is really one of the finest a boy can follow. There is no limit to its possibilities, he can either follow

a humdrum existence at home or fit himself as a pioneer in foreign lands, specializing on some economic plant.

It is true the routine of an ordinary nursery does not fit him to become manager of a tea plantation in Ceylon, or a coffee grower in Brazil or the Curator of a Botanic Garden in some distant and undeveloped corner of the earth.

Yet the fundamentals of horticulture are the same the world over and there is no better place to learn them than in a well managed nursery.

The boy worth while is ambitious, he must have a goal in view at least in his imagination, the only one that is hung up before him on the average nursery is plenty of hard work without a very inspiring future.

No one tells him of the possibilities of his becoming the best propagator in the country, or fires his enthusiasm with the thoughts of owning a cocoanut grove.

He is isolated without a class standing such as exists in schools, colleges, railroads, factories and workshops.

The old practice of apprenticing to learn a trade or business had much to commend it but it is a thing of the past and there has been nothing organized to take its place.

The learner takes his chance with the laborer and very soon gets into the laborer's way of thinking that the pay envelope is the sum total and end of the days' work.

Camp Lewis, American Lake, Wash.
October 22nd, 1918.

Mr. Howard E. Weed,
Mt. Vernon Nursery Co.,
Mt. Vernon, Wash.

Dear Sir:—

Our landscape gardener informs me of your acquisition of the Mt. Vernon Nurseries and of your intention of removing much of the material to Beaverton. No doubt there will be some material not sufficiently marketable to warrant transferring to your Oregon Nursery.

We are attempting to improve the scenic appearance of Camp Lewis, but unfortunately must rely upon the generosity of Nurserymen, Park Boards and Private Citizens for contributions of plants, because of the fact that there are no funds available for landscape work from the War Department. It is impossible, therefore, for us to decorate the 70,000 acres that comprise this Cantonment like a City Park, so we are concentrating our efforts to improve the surroundings of the main headquarters, recreation halls, libraries and hospitals.

The cheering influence of flowers, vines and shrubs need no defense and especially when it relieves the monotony of barracks life. It is our desire, through the patriotic support of the citizens of the northwest to make Camp Lewis the most beautiful Cantonment in the country. The result of this improvement will affect the future, as well as the present, since this camp will remain a permanent Government drill grounds.

Needless to state we can use any material from bulbs, roses, vines to shrubs and trees. Any assistance you can give to this work will be greatly appreciated, whether by direct contributions or indirectly by influencing others.

Kindly inform us if you are in position to aid us in the matter.

Yours very truly,

E. I. THRALL,
Custodian, Division Headquarters,
Camp Lewis, Wash.

Mr. E. I. Thrall,
Custodian,
Camp Lewis, Wash.

Dear Sir:—

I have your recent letter regarding a donation of nursery stock for Camp Lewis. I am wondering who your landscape gardener is to whom you refer. Last August the Y people asked me to come there to beautify the Camp, but the matter was given up by them awaiting a special appropriation for this particular work.

Yes, I have recently purchased a half interest in the Mt. Vernon Nursery, but propose to continue the business here as well as the Weed Landscape Nursery at Beaverton, Oregon.

You ask for a donation of nursery stock. Does the Government make this a practice and ask the manufacturers in other lines to contribute clothing, groceries, etc.? If this is the custom, then I will see what I can do. But I am free to say that any nursery stock obtained in this way would be largely that much junk. It would

be stock that is not well grown and the nurseryman having no sale for it would be willing to give it away rather than burn it.

Really now, you and the National Flower Guild are going at this matter in the wrong way. Why not have your Landscape Architect make up a list of the stock wanted and then if no funds are available, ask for contributions of money to pay for it. For if you know of any nurseryman who is making other than a bare living out of his business, kindly let me have his address as I would like to know how he does it. On the other hand if you wish a list of men who have gone broke in the game and others who are nearly there, I can furnish you with long list of has beens.

The nurserymen of the country are doing their full share in all war work, liberty loans, etc. But I believe that I speak for most of them when I say that we see no reason why the government should not purchase our manufactured goods when wanted, just as other things are bought and paid for.

Sincerely yours,

HOWARD EVARTS WEED.

TREES AS MEMORIALS

An Atlantic City clergyman has suggested the idea that for every man from that locality, who dies in the army, there shall be planted a tree in one of the public parks or in the strips along the streets where it can be conserved and dedicated to his memory. This involves an honor guard to watch the tree and replace it in case of disaster.

The suggestion comes at the same time when the War Conservation Board announces that no bronze or stone memorials to the dead may be erected until after the war is over. It is really an admirable idea and ought to have widespread following, regardless of the coming days of peace. Bronze may last for millenniums, although it expresses nothing but abstractions at best. A tree symbolizes the dead who have passed to more progressive sphere and preaches the solemn truth that nothing ends but life goes on forever.

If it be said that a tree is too ephemeral to vitalize the services of a hero, it may be answered that no man lives beyond the memory he leaves behind him. Those who love the dead will care for his tree as well as for his grave, and when loved ones are gone there will be little care by anyone. Most of us believe that our fallen heroes are to be translated to an atmosphere where their souls may progress. All that is needed here is love by the immediate family and honor by descendants so long as that lasts. A tree will last thus long and it will typify growth better than cold marble.

Wordsworth has told us in immortal verse of the Happy Warrior. Only to be mourned are those who in this crisis have not done the best that was in them to make a permanent peace on earth.

Holland is Trying to Meet All Requirements to Prevent the Entry of Plant Diseases or insects on Nursery Stock

PRIOR to the institution of the Phytopathological Service in Holland, the nurserymen took the greatest care of their grounds and much was done for controlling plant-parasites, because cultivation is done very intensively and consequently cultivating inferior plants does not pay.

Since 1899, when official inspection of nurseries was instituted, the controlling of insects and plant-diseases was carried on according to a fixed plan. The application of controlling measures was not confined to those who exported plants, but in the large nursery centres as well as in other parts of the country, the controlling was maintained on a large scale.

Fully aware of the necessity of giving the highest possible assurance as to the absence of insects and plant-diseases in shipments for export, the phytopathological service of Holland was not content with the results obtained, but has ever since exerted itself to improve the work of inspection. Since 1910 the certificates have not been issued on the mere results of the inspection of the grounds, but from that time all plants intended for export have been inspected before being packed and shipped.

Consequently we did this, before the United States required this inspection as a qualification for import, or before this was done in any other part of the world.

The improvement of the work of inspection and the more rigid application of the controlling measures has ever since been maintained. In a number of communities, several of which are situated in the most important nursery-centres, regulations are even now being issued, according to which nurserymen as well as private persons are compelled to apply special controlling measures on certain kinds of nursery stock. The necessary attention is also paid to the presence of insects and plant-diseases, which eventually might be imported with earth. So that constant control of the mole-cricket, which occurs on certain kinds of soil in our country, led to a total extermination of this insect on many nurseries. The control of *Othiorhynchus sulcatus* is general and has also given important results, and the same may be said of other insects. In this way equal attention is paid to plant-diseases and insects which occur on and to those under the surface of the earth. Continual inspection is made (as far as possible) on all nurseries in the country and the application of controlling measures is enforced. All this is not done because the disease and insects cause so much damage to our nursery-stock, for this damage is exceedingly small. These regulations aim at making the stock perfectly clean even from the slightest infestation with insects or plant-diseases, because we are fully aware, that only such stock may be considered fit for export.

The controlling-measures on the nurseries are especially against those insects which f. i. hiber-

nate in the ground and the presence of which can be detected with difficulty on stock with earth.

To find out the results of the work of inspection, a circular was sent in March 1914, to the chiefs of the services of inspection in the various States of America to ask whether in the (then almost ended) season 1913-'14 stock had been rejected on account of infestation by insects or plant-diseases. To this circular thirty answers were received. Of these thirty answers twenty-two were unconditionally favorable about the work done by the phytopathological service of Holland, whereas the others contained mostly but very trifling remarks. From this I may conclude, that our work is considered to be more than sufficient, by a large number of inspection-authorities in the United States.

Although the results of our work are up until now very satisfactory, still the phytopathological service aims at a higher standard. Every suggestion from America, which may lead to an improvement, will be gratefully accepted.

A large staff will give a more rigid inspection, in summer of the nursery grounds and in winter of the nursery stock, to warrant the best possible condition of everything intended for shipment.

We come to the following conclusion:

10. That the sanitary conditions of the nursery-stock in Holland have always been particularly good, because the intensive cultivation made this of vital importance;

20. That the phytopathological service exerts itself to the utmost to control insects and plant-diseases in the nurseries and is supported by laws and local regulations and by the general co-operation of the nurserymen;

30. That this controlling is maintained with great success and that a rigid inspection of the nursery-stock when ready for export completes this work;

40. That equal attention is paid to all insects and plant-diseases, and consequently there is no reason for the supposition, that the chance of importing these insects and diseases on plants with earth is practically greater than on plants without earth;

50. That the opinion of American inspection authorities about the sanitary conditions of the nursery-stock imported during the season 1913-'14 from Holland was most favorable and that the few remarks which were made did not relate to insects and plant-diseases which might specially have been imported in balled plants;

60. That the phytopathological service of Holland still aims at a more rigid control on the nurseries and a still sharper control of the plants to be exported and that all remarks which may lead to improvements, will be gladly considered.

We hope, that the Federal Horticultural Board, after perusal of the facts mentioned above, may not resolve to take measures, as far as Holland is con-

cerned, to prohibit the importation of balled plants into America.

THE DEPUTY CHIEF OF THE PHYTOPATHOLOGICAL SERVICE,
(s.) N. van Poeteren.

Berlin, Md., November 11th, 1918.

National Nurseryman,
Flourtown, Pa.

Gentlemen:—

The lack of demand caused hundreds of acres of nursery stock to be pulled out and burned during the past five years and wheat, corn, potatoes and other vegetables grown. That was right to feed our soldiers and Allies.

If the nurserymen will continue to grow a part of their land in staple crops, it may help to avoid another overproduction of nursery stock in such a short time.

We shipped from Harrisons' Railroad Siding this year four cars of potatoes, 51 cars of peaches, four cars of pears, 51 cars of nursery stock.

We harvested about 3,000 bushels of corn for our teams and a good quantity of wheat, oats and peas.

There is a scarcity of good nursery stock, but we find enough compared with the amount of labor to dig, pack and plant. It's a good time to go safe. Grow your food for man and beast!

Very truly yours,

ORLANDO HARRISON.

TOO MUCH LITERATURE

As the Experiment Station Record, Department Year Books, Bulletins and the multitudinous publications issued by the U. S. D. of A. and the various State Departments of Agriculture come to hand it makes one question, are they worth while?

Is their value commensurate with the stupendous labor required to produce them? to say nothing of the cost in money.

Judging from a decade of observation the writer offers the opinion that it is not. And further that the advanced or scientific knowledge of agriculture and horticulture of the United States is largely hidden away in books and almost valueless because not used.

It is a peculiar trait of human nature that anything that may be had for the asking is lightly valued and suggests the thought that the whole conception of our experiment stations and horticultural colleges as a means of educating the public is wrong. It is modeled too closely after the sciences such as medicine that require little action with much study, whereas agriculture and allied professions are still subject to the ruling "In the sweat of thy face shalt thou eat bread." Science is trying its best to sidestep this penalty but not succeeding very efficiently. Fundamentally the earth only gives

of her bounty to those who work with their hands as well as their brains.

If the horticultural and agricultural schools turned out more practitioners who would teach by action and results and less books, the scientific data would be of more value to the country.

We can learn much from older countries whose votaries acquired their skill in the field and garden rather than in the class room.

The boy who goes through high school and then spends several years at an agricultural college, with its courses of playing at work does not seem to measure up to the boy who goes direct from the high school to serve apprenticeship at a good nursery, garden or farm before finishing his education at college.

The old controversy that used to be so much debated among gardeners and horticulturists, Practice versus Theory, Book learning versus Practice, Scientific knowledge versus Practical Experience has almost died out. The old school of rule of thumb practitioners have given place to college men and science orders all things.

The economic Entomologist, chemist and bacteriologist sit on the throne and issue their edicts governing the plant life of the country. Nature goes along just the same, working under the laws that brought the entomologist into being, resenting when her laws are broken and demanding full indemnity. She shows no leniency for errors of ignorance and withholds her harvests when cheating is attempted. Dig or plow and manure you must or she will withhold her wages.

The old practitioner may not have had much theory or book learning, but he at least knew how to work and produced results.

GERMAN NAMES

There has been considerable agitation noted, since the war with Germany, in favor of discarding German names of roses and other plants of German origin.

However much we may loathe anything that calls to mind the dishonor and bestiality of a government gone mad, there is something childish and impotent in changing the name of a flower and denying its origin.

If the flower in question is of American origin and named in honor of some one or something German it would be quite correct to cancel the compliment but we have no right to change the name of a plant of German origin. The real American thing to do would be to raise something superior and give it an American name. In the meantime allow German plants to retain their German names as a continual reminder of faith misplaced.

The Northern Nut Growers' Association is carrying on an active propaganda to encourage the use of nuts, calling attention to the great food value in them, and doing everything possible to encourage the planting of nut groves.

The membership in the Association is \$2.00 per year and includes a copy of the current annual report. The Secretary is Willard G. Bixby, 46th & Second Avenue, Brooklyn, N. Y.

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by
THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

Advertising rates will be sent upon application. Advertisements
should reach this office by the 20th of the month previous to the date
of issue.

Payment in advance required for foreign advertisements. Drafts
on New York or postal orders, instead of checks, are requested by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., December 1918

Subscribers to "Nurserymen's Fund for Market Development"

A Christmas Wish from The National Nurseryman

*Since our last issue the sun has burst through the
clouds that have been hanging over the world for
over four years.*

*Four years in which the selfish egotism of a com-
paratively few men brought disaster and untold
suffering and death to millions.*

*The armistice signed on November 11th, made
many of us realize for the first time the full mean-
ing of the Christmas wish, Peace on earth, Good
Will among Men.*

*May the results in happiness, peace and progress
for all be commensurate with the terrible cost.*

RECONSTRUCTION

For us stay-at-homes, the signing
of the armistice, meant the fight-
ing men have done their "bit."
Now it is up to us, the industrials at home, to again take
hold and get busy.

Things are in a mess, all right, and it will take some
industrial Fochs, Haigs and Pershings to put the forces
in effective working order.

There are already indications that sound policies will
control.

Thousands of us, before the war, believed that Ger-
many's methods to secure world domination were bound
to succeed because they were efficient, abundantly fin-
anced, scientific and practical. The atrophied conscience,
resulting in a policy contrary to the best ideals of hu-
manity doomed her to failure.

The success of reconstruction will depend equally upon
the righteousness of the policy adopted. If vengeance
for the horrible atrocities that have been committed is
allowed sway, more of the innocent, ignorant and help-
less will suffer with the guilty. Nothing is gained by
vengeance, but everything by justice tempered by
mercy, and we can safely leave that phase to the states-
men. The one thing we cannot leave is our own respon-
sibilities for the success of the reconstruction.

We shall have to fix our own business policy for the
reconstruction after the present disorganization.

It is not possible things will go on as before the war,
when the gulf was so wide between master and man,
employer and employee, capital and labor. They will
pretty nearly have to be equal partners if success is to
be assured, and the business that can come nearest to a
true democracy and yet develop enterprise, and discipline,
will help most in restoration.

Between business and customer "fair play" will have
to take the place of "business is business." The am-
bition of making a pile will have to give place to ambi-
tion to give service for a fair profit or else the terrible
lesson of the last four years will have been in vain.

Reconstruction of our own ideas will have to come first,
if they are still based on the practices of the old regime.

The ethics, policies and practices to be followed by
nurserymen in the future have been ably outlined by the
President of the National Association of Nurserymen, and
other leaders, and if there is one time more than all others
a great effort should be made to put them in active opera-
tion by all who wish for the success of our profession,
it is now.

Charles E. Estey, director of the
department of publicity of the
United Typothetae of America,
says:—

"Commercially speaking, the world war afforded the
opportunity for teaching the importance of standardizing
our methods of merchandise distribution.

"Advertising makes it easy for the public to buy stan-
dardized goods by the simple method of increasing the
common knowledge and appreciation of trade-mark
merit. The influence of advertising reaches into all in-
dustrial life and aids in the development of new outlets
for goods."

The nurseryman's products are not so easy to stan-
dardize as a manufactured article, but good growers
know there is an approximate standard for every plant
that is grown and the sooner the public is taught to re-
cognize it the sooner will the nursery business have a
fixed base upon which to build for the future.

VALUE OF NURSERY STOCK

On another page we publish a letter from the Custodian, Division Headquarters, Camp Lewis, Washington, asking for donation of trees and plants to beautify the Camp and the reply thereto. This is the second of such requests that has been brought to our notice and shows how general is the idea that nursery stock is of little value even among those whom you would think would know better.

The surplus stocks and brush pile is one of the main causes of this impression so prevalent with the layman, and we cannot blame them. They naturally think the nurseryman is a type of man who would rather give his surplus to a good cause than burn it, without stopping to think he is taking advantage of the nurseryman's misfortune.

Another peculiar phase is the common belief that promiscuous planting or sticking any kind of plants around beautifies, even nature does not do that but selects her plants with extreme care.

We never find desert plants in the swamps or tropical plants in the arctic regions.

There is plenty of work ahead for the Market Development.

CANADIAN NURSERIES

One has to be very much alive to keep posted on the progress of the nursery business in their own home state but when it comes to the distant provinces of Northwest Canada, we are apt to consider them almost unexplored countries that will be without nurseries of any moment for several generations to come.

The catalogue of the Prairie Nurseries, Limited Estevan, Saskatchewan, Canada, has just come to hand. A province lying north of Montana and the Dakotas does not appeal to the average nurseryman in the states as a promising place to start a nursery. Yet the Prairie Nurseries has grown from the modest start of \$2000.00 capital in 1911 to the largest nursery concern in Western Canada, employing from 50 to 75 men to fill orders in the packing season. Last fall during the month of October 37 carloads of stock were shipped to customers living along the railroads of the province.

Here is a nursery barely seven years old in a locality we are apt to consider pretty close to the arctic circle, thinly populated and about as poor a field for the nursery salesman it would be possible to imagine, has established a school for their salesmen. Last year the cost of this school, which was in session in Estevan from March 4th to the 14th cost the firm \$1,200.00. Such a scheme means real Market Development. It is easy to imagine the *esprit de corps* that would be developed among the salesmen before going on the annual trips to say nothing of the knowledge of the goods and the information they would have to give to their customers about the care and cultivation of the trees, fruits and plants they sell.

Their Policy Points as published in their catalogue indicate a broad liberal policy toward their customers and are worth comparing with those of progressive concerns in the States.

1. We pay express or freight charges on shipments made to any station in Western Canada.

2. No charges are made for boxing and packing the order or for containers, moss, paper, etc. We use great care in packing the orders—it insures healthy trees.

3. We line all boxes and bales with paper. It costs more but it keeps out wind and frost. We spend over a thousand dollars a year for paper alone.

4. We guarantee safe arrival. Orders lost or damaged in transit are refilled free.

5. Stock is guaranteed true to name. If mistake occurs full replace is made free of charge.

6. Our Main Policy is to fill orders with the Finest, Healthiest, Hardest trees grown in the north, for the same price or less than you would pay for inferior stock.

7. Only varieties that have been proved absolutely hardy in the Prairie Provinces are offered for sale.

8. All stock that fails to grow will be replaced for a period of two years at half price.

9. Our unrivalled Service provides full Planting and Cultural Instructions, as well as the free services of our Landscape Gardening Department.

10. Satisfaction is certain. We aim to treat every customer fairly and honestly. All of our salesmen, Nursery employees and members of the office staff are proud of the record made by the Prairie Nurseries, Limited, and exert every effort to give Satisfactory Service.

The list offered in their catalogue, due to the northern locality, and the short existence of nurseries or testing stations in this new country is necessarily brief.

Leaders among the trees are *Acer negundo*, *Fraxinus viridis*, Poplars, Willows, Birches, Hackberry, Elm and Mountain Ash.

The evergreens are represented by *Pinus ponderosa*, *P. divaricata*, *P. sylvestris*, *P. resinosa*, *Picea nigra*, *Picea alba* and *P. pungens glauca*.

The apples are Hibernian and the Duchess of Oldenburg, both of Russian origin. Patten's Greening, evidently of local origin is considered the leading apple for the Province.

Plums, cherries and Siberian crabs are offered. Small fruits, strawberries, currants, gooseberries, raspberries are evidently a specialty as they naturally would be among the farmers and settlers of this vast wheat growing country.

Hedge plants seem to be confined to the Buckthorn, *Rhamnus catharticus*, Siberian Pea, *Caragana arborescens* and Russian Olive.

The leading flowering shrubs are the lilacs, spiraeas, prunus, Philadelphus, common snowball, bush honeysuckles, flowering currants, elders, red-twigged dogwood, Amelanchier and the hardier kinds of H. P. roses.

Judging from a full page advertisement in a leading newspaper of the province, W. T. Torgeson, the managing director is evidently not hampered by tradition, he sees the great need of the Prairie Country is trees and he is aiming to supply it.

Notes from Arnold Arboretum

Valuable Information for the Planter of Evergreens

The collection of cone-bearing trees and shrubs is of special interest this autumn as during the past twelve months it has had to endure such severe weather conditions that plants which are now in good condition should be able to successfully support any extremes of heat, cold and dryness which they are likely to meet with in Massachusetts. In discussing the possibility of cultivating conifers in the northeastern United States it must be remembered that at its best this is not a favorable climate for these trees. There are only a few indigenous species here in New England, and all the exotic species which can be grown here grow better in other parts of the world. This is the region for trees and shrubs which lose their leaves in autumn and the man who wants to plant successfully and permanently here must use these plants, and not conifers or broad-leaved evergreens, unless he is prepared to suffer many disappointments. It is the business of a scientific establishment like the Arboretum to experiment with all plants which, judged by the region where they grow naturally, have any chance of success and to report failures as well as successes. Enough is now known of the habitat and climatic conditions necessary for the conifers of the world to make it possible to say that none of these trees which grow in any part of the world south of the equator can grow here. It is now known that none of the conifers of the southern United States, Mexico, Central America and the West Indies can be grown in the north. This is true, too, of the species of southern Europe, northern Africa, southern India, south-western China, Formosa and the southern islands of the Japanese empire. Of the conifers of the Pacific coast of North America only a few can grow at all in the east. The planter of conifers therefore in the New England, middle and middle western states must make his selection from native species, and from the species of northern Japan, Korea, northern China, Siberia, the Caucasus and eastern and northern Europe. That is, the largest and some of the handsomest and most interesting trees in the world cannot be successfully grown in the United States except in the south, and in western Washington, Oregon and California where the climate is better suited to the successful cultivation of conifers perhaps than that of any other part of the world, with the exception possibly of New Zealand where conifers from all parts of the world have grown with astonishing rapidity and vigor, and in the case of some species to a larger size than individuals of the species attain in their native lands.

In spite of the unusual and prolonged cold of the winter which followed a dry summer, the cold spring and the drought which lasted from April to September the Arboretum conifers are not in bad condition, and it is now possible to discuss with more confidence the value of many exotic species than it has been before. Only one

species has been entirely lost from the effects of the severe winter. This is the blue-leaved form of *Cedrus atlantica*, a native of the mountains of Algeria. There was only one specimen in the Arboretum where it has been growing for many years in a sheltered position in the middle of a pine grove. This beautiful tree sometimes grows fairly well south of Cape Cod, but there is little hope that it will live for more than a few years at a time in Massachusetts.

Some of the species of the northeastern states have suffered more than any of the exotic species, and several plants of the Red Spruce (*Picea rubra*) were killed or so badly injured that it was necessary to destroy them. If any coniferous tree should be hardy here it is the Red Spruce which grows on some of the high mountains of New England and close to the seashore of Maine and New Hampshire where it is fully exposed to the gales from the Atlantic. The Red Spruce, although there are now a number of healthy individuals in the Arboretum, does not take very kindly to cultivation and always grows slowly. Another eastern American tree, the short-leaved Pine (*Pinus echinata*) was injured by the winter. This tree finds its northern home on Staten Island, New York, and there have been a number of trees raised from seeds collected at this northern station growing in the Arboretum for twenty years. These all lost their leaves and several were killed; the others produced new leaves in June and now look nearly as well as ever. One specimen of this Pine raised here in 1879 from Missouli seeds also lost all its leaves but is now in comparatively as good health as it was a year ago. Several plants of the White Cedar of the eastern states (*Chamaecyparis thyoides*) lost their tops and were a good deal injured by the winter although none were killed. This plant has not taken kindly to the conditions the Arboretum affords it, but it is surprising that it is not more hardy here, as within twenty miles of Boston there are hundreds of acres of low ground covered with forests of this tree.

CEDAR OF LEBANON. The Cedars of Lebanon raised here from seeds gathered on the Anti-Taurus, which have been growing in the Arboretum for sixteen years and which have not before been injured by heat or cold, in early spring lost all their leaves which had been killed by the excessive cold of the winter; they soon put out a new growth, however, and although the branches are now less densely covered with foliage than in other years the trees are in good health. Among the Spruces and Firs the Grecian and Roumanian form of *Abies cephalonica* (var. *Appollinis*) suffered the most, and although the plants are still alive they can never grow into good trees. Some small plants of *Abies cephalonica* were killed, but the large plants of this Fir in the collection are in good condition, although this tree was badly injured in other collections in Massachusetts and New York. *Abies cilicica*, which has been for many years considered one of the hardiest and handsomest of the

Firs which can be grown in the northeastern states, has suffered seriously in other collections, but in the Arboretum it was little injured by the winter and is now in good condition. *Abies amabilis* from the Cascade mountains of Oregon, although always a slow-growing, shabby looking tree in cultivation, lost a good many leaves in the spring but is now in its usual health. *Abies grandis* from the northwest coast, planted in sheltered and exceptionally favorable positions, is uninjured, but for general use in New England this handsome tree should not be depended on. The Sugar Pine of the California Sierras (*Pinus Lambertiana*) and the Chinese White Pine (*P. Armandi*) lost a good many leaves but now look as well as usual. The Japanese Black Pine (*P. Thunbergii*) suffered more in the loss of its leaves, but the buds were uninjured and the trees, although somewhat disfigured, are recovering.

Among the long established trees here which are not native in New England and which show no evidence of having just passed through the most serious experience of their lives, and may therefore be considered suitable for cultivation in the northern states, are all the forms of the Norway Spruce (*Picea Abies*), the Balkan Spruce (*P. omorica*), the Caucasian Spruce (*P. orientalis*), the Siberian *Picea obovata*, *Picea Schrenkiana* from Chinese Turkestan, all the Japanese species, and the species of the Rocky Mountains *P. pungens*, *P. Engelmannii* and the western form of *P. canadensis*. The Firs not already mentioned which have not been injured are the Rocky Mountain form of *Abies concolor*, which is the most satisfactory of all Firs in the northeastern states, the Caucasian *Abies Nordmanniana*, the Japanese *A. homolepis*, (or *brachyphylla*) and *A. Veitchii*. Like the eastern American Balsam Fir (*A. balsamea*), the Rocky Mountain *A. lasiocarpa* and the Fir of central Siberia (*A. sibirica*) are perfectly hardy here, but are short-lived shabby trees in cultivation, and are not worth planting in eastern North America. The Korean *A. holophylla* was first raised at the Arboretum twelve years ago and it is still one of the rarest of all conifers in cultivation. Fortunately Wilson sent from Korea a year ago a supply of seeds of this tree; these germinated well and there are now many seedlings in this country and Europe. The twelve-year-old plant has grown well in the Arboretum; it has not suffered from cold or heat and promises to be a good tree here. The Douglas Spruce (*Pseudotsuga mucronata*) raised from seeds gathered in Colorado, has been growing in eastern Massachusetts for nearly fifty years and promises to live long here and grow to a large size. Numerous specimens of the Carolina Hemlock (*Tsuga caroliniana*) have been uninjured by the cold and drought of the year. This is one of the handsomest of all cone-bearing trees which can be grown in this part of the country. One plant of the Japanese *Tsuga densiflora* was killed during the winter, but several others were uninjured. Small plants of the Japanese *T. Sieboldiana* have lived in an exceptionally sheltered posi-

tion, but there is little hope that this beautiful tree, which is more southern in its range than the other Japanese Hemlock will ever live long in Massachusetts. A small plant of the Hemlock of the Northwest coast of North America (*T. heterophylla*), the largest and handsomest of all Hemlock trees, was uninjured in a sheltered position. There is not much probability, however, that this tree will live for more than a few years in this part of the country. The Chinese Hemlock (*T. chinensis*) was injured by the winter and probably will never be very successful here.

PINES. The European and Asiatic *Pinus sylvestris*, the so-called Scotch Pine, the Austrian and other forms of the European Black Pine (*P. nigra*), the forms of the European *P. montana*, and the Swiss and Siberian forms of the Stone Pine (*P. Cembra*) have not been injured. The Japanese White Pine (*P. parviflora*), the Japanese Red Pine (*P. densiflora*) and the Korean form of this tree which the Japanese botanists call *Pinus gracilis*, seem able to support the new England climate without injury. The Korean Nut Pine (*P. koraiensis*) which has produced seeds in the Arboretum for several years, and the Lacebark Pine of northern China (*P. Bungeana*) are uninjured. Of the Pines of western North America only *Pinus monticola*, *P. ponderosa* var. *scopulorum*, and *P. Jeffreyi* grow successfully in the east, and these are uninjured, as are the eastern American *P. pungens* and *P. virginiana*. The northern *Pinus Banksiana*, which just reaches northern New England, with a doubtful station on Nantucket, grows well in the Arboretum but not as well as it grows much further north. Although killed last winter in some New England collections, the Japanese Umbrella Pine was little injured in the Arboretum.

None of the Arbor Vitae in the large collection of these trees here suffered with the exception of the Chinese *Thuja orientalis* which is never a very hardy or satisfactory tree in this part of the country. It is of particular interest that plants of the western Arbor Vitae, the so-called Red Cedar of the northwest (*T. plicata*), raised here from seeds gathered in Idaho, have been uninjured, for this is one of the great conifers of the world. In a sheltered position several plants of the California Incense Cedar were little injured by the winter. There has been little injury to the Junipers, and the Larches and the Chinese *Pseudolarix* have not suffered.

NEW CHINESE CONIFERS. It is too soon to say much about the new conifers introduced by Wilson from northern China. All the forms of *Pinus sinensis* are growing well and appear to be hardy. All the Spruces have also done well with the exception of *Picea Sargentiana* which has suffered from cold and will probably not be hardy here. The Chinese Firs grow less well than the Spruces and only *Abies Delavayi* gives much promise of success.

INCREASED EXPRESS RATES

General increases in express rates were announced November 20th by Director General McAdoo, of the Railroad Administration.

East of the Mississippi and north of the Ohio and Potomac Rivers, the new rates on merchandise will be about 16 and 17 cents per 100 pounds more than at present. The increase on food rates will be about 75 per cent. as much.

For the remainder of the country, the merchandise rate will be increased about 10 to 12 cents per 100 pounds over the present scale, and the increase in food rates will be proportionately 75 per cent. The increase, it was announced, is due to increases in wages.

The new order, effective January 1, will raise about \$24,000,000 additional revenue, half of which the American Railway Express Company, before it was taken over entirely by the Government, had planned to distribute among employees in higher wages. The wage question is now before the Railroad Administration's board of wages and working conditions.

The reason for making the rate increase greater in Eastern territory, it is stated, was that hauls there are shorter and city delivery and terminal service, necessarily expensive, is proportionately higher.

Specifically, the express rate order provides that rates in the East, or rates on shipments originating in the East, be advanced 16 or 17 cents on first and second class shipments, and that elsewhere this increase be approximately 12 cents. Local differentials would make the exact advances vary somewhat about these averages.

Merchandise rates to Canada are raised 15 cents per 100 pounds, and commodity rates, with many exceptions, are to be raised 10 cents per 100 pounds. Milk and cream rates, interstate and intrastate, are to be advanced 25 per cent. above the rates in effect last July 1. Garden produce and other food articles shipped extensively by express to cities will take the new rates of the classes in which they fall.

Intrastate scales and classifications are abolished.

GOOD PROSPECTS FOR BUSINESS

According to the daily press, there are one hundred million dollars worth of building plans said to be on the boards of New York architects, waiting permission of the War Industrial Board to appear in the form of specifications and proposals for contract bids.

In degree, the situation is duplicated all over the country.

It is easy to imagine the resultant effect on the demand for landscape service and nursery stock when building and improvements once start in earnest.

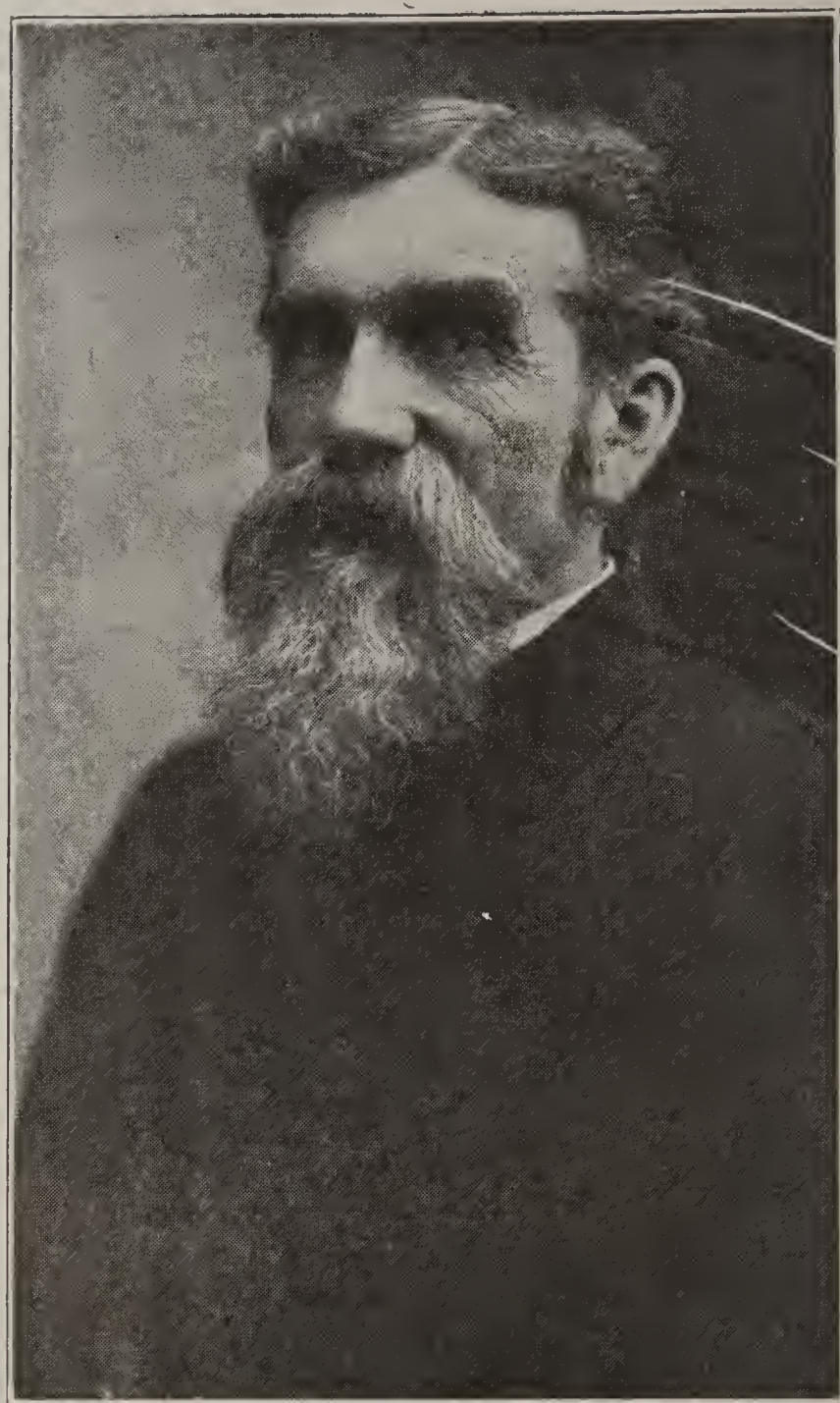
Obituary.



LEWIS R. TAYLOR

Lewis R. Taylor, founder, and until recently senior member of the firm L. R. Taylor & Sons, Topeka, Kansas, died at his home, Oakwood Farm, near Topeka, October 19th. Mr. Taylor was in his seventy-eighth year, and had been bedfast for over a year.

Lewis R. Taylor was born near Gettysburg, Pa., January 2d, 1840. His early years were spent in this vicinity, and he counted it one of the privileges of his life to have heard Abraham Lincoln deliver his immortal address on.



the occasion of the dedication of the Gettysburg National Cemetery.

Mr. Taylor began his life work, that of nurseryman, as a boy, starting as a nursery salesman. About 1860 he began work in the nursery of Geo. Peters & Co., of Troy, Ohio. A year or two later he began growing nursery stock under contract for the above firm.

In 1869 Mr. Taylor moved with his family to Topeka, Kansas, making his first planting of nursery stock at Topeka, soon thereafter. He was Dean of the nursery business in that section, and made the first commercial

planting of apple seed in the Kaw Valley in 1880. He watched the seedling industry grow from his first small planting made with a hand drill, until the present time when practically the entire supply of the United States is grown in the Kaw Valley.

In 1890 he entered into partnership at Topeka with Wilson Peters and J. H. Skinner. A few years later this partnership was dissolved, and Mr. Taylor became senior member of the firm L. R. Taylor & Sons. Some eight years ago he retired from the Nursery business selling his interest in the above firm to the present owner, his son, E. R. Taylor.

Mr. Taylor was well known to all the older members of the trade, and was a familiar figure at all the early meetings of the National Association of Nurserymen.

JACOB KREWSON

Jacob Krewson, father of James Krewson, the proprietor of James Krewson & Sons Nurseries, Cheltenham, Pa., died recently at the age of 97 at the old homestead situated on the nurseries.

It is not given to many men to live to see the wonderful changes that have taken place in the last century.

He had always lived within a few miles of his birthplace. As a young man he was an iron worker, when the entire process was done by hand, a four horse team being the limit of power in transportation.

The rolling mills were run by water power. James Krewson still has the gong, a pear-shaped piece of iron which was struck to tell the men the metal was melted and ready for drawing, should they be fishing or in swimming.

In those days the wages for the men at the rolling mills was 62 cents per day, a foreman or boss 87 cents per day.

A house with an acre of ground with the privilege of pasturing one cow cost \$25. per year.

It is difficult to realize that the huge Midvale Steel Works had such a modest beginning or that things have so completely changed during the life of one man.

Mr. Krewson leaves one son, James Krewson, founder of the nurseries, five grandchildren, and nine great-grandchildren.

BENJAMIN CONNELL

Benjamin Connell was a well known figure in the florist and nursery business of the eastern United States. An acquaintance of over 50 years among his associates left with them an impression of one who gave close attention to business, who possessed a rare knowledge regarding both supply and demand, coupled with an ability to use that knowledge for the building of a very considerable business, chiefly as a dealer. His strict integrity and faithful attention to his duty as he saw it in family,

civic and business life, is a credible record sealed by his death, November 9, 1918.

The deceased was born in Ireland, December 7, 1843, and emigrated to this country when a mere boy of 13, and with his parents and other brother and sister, located at Jennersville, Pa., they having preceded him by a year. When quite young, he took a position with the Dingee & Conard Co., and learned the florist business, with which concern he was identified for 30 years. He then established himself in business which he conducted in West Grove, Pa., up to 10 years ago, when he moved to Merchantville, N. J., where he again married. He is survived by his wife, Elizabeth F., and by five sons and one daughter by the first union, and a young daughter by the second marriage. He was well thought of and respected in the community in which he lived as well as his former Chester county home. He was ill only eight days, the cause of death being influenza-pneumonia.

CONARD & JONES CO.

The present scarcity of coal all over the country gives those owning wood lots an opportunity to clean them up at little or no expense, if not a profit.

The scarcity of fuel makes it a patriotic duty for everyone to burn wood when it is available, and conserve coal.

By thinning out dense stands, by removing diseased trees and using them as a fuel, they will be improving the wood lot, giving the good timber a chance to mature, and help the coal shortage. Selling cord wood ought to be a good business this winter.

THE TREES AND THE HERO MEMORIALS

While the communities of the country, large and small, are getting their bearings as to the character of the permanent memorials to the heroes of the world war there will be complete unanimity as to the wisdom of formal tree-planting in parks, on highways, boulevards and parkways, in and about schools, public buildings and on college campuses in honor of those who gave their all for their homes and their country.

It has been clear, too, for some time that the country is decidedly impatient with the general average of the soldier memorials that sprang up everywhere after the Civil War. The least said about the most of them the better. So, as the better thought prevails and there is a demand everywhere for pause and judgment in selecting the kind of memorial that will meet the needs of the hour, the immediate desire to do something at once can well take the form of tree-planting. For over a generation most of us have been familiar with the Arbor-Day idea, and it will be very easy to direct this vital idea into

new channels called for by the proposed soldiers' memorial, tree groups and memorial avenues.

Curiously enough, Joyce Kilmer, one of the militant poets who gave up their lives for their country, evidently had a premonitory sense that the tree was to figure more largely and emotionally in American life. And it would be fitting, therefore, if, wherever the tree memorials to our soldiers and sailors be set up, there should appear in imperishable bronze his lovely tribute that makes the trees, as it were, brothers to the heroes their greenery will commemorate. It runs as follows:

I think that I shall never see
A poem lovely as a tree.

A tree whose hungry mouth is prest
Against the earth's sweet flowing breast;

A tree that looks at God all day
And lifts her leafy arms to pray;

A tree that may in summer wear
A nest of robins in her hair;

Upon whose bosom snow has lain;
Who intimately lives with rain.

Poems are made by fools like me,
But only God can make a tree.

Philadelphia Public Ledger.

NO TIME FOR GLOOMS

Not a few persons are busily working over-time in making all sorts of bogeymen, walking ghosts, and blue devils that are to spring their appearance in labor, industry and finance with the return of peace and the advent of "reconstruction."

These are almost invariably the same persons who were conjuring up a like assortment of glooms when they assured us, at the opening of the war, that we would have an awful time of it in sizing up to the tasks which we would be called upon to share with the Allies.

Of course we are going to have, for a while some pretty hard nuts to crack, but they are not likely to be any harder than those which we have been cracking in first-rate fashion during the past year and a half.

This is not a Bolsheviki country; it is not built that way, and never has been. The American people were never so level-headed as they have been in the entire course of the war, and there is not likely to be less of such level-headedness in the average, despite our Calamity Janes, when we shall work out the problems of peace.

It has always been a safe and sure thing in the long

run to be a bull on the United States; and that faith in the capacity of the vast majority of our country-men to meet their troubles sanely and squarely, should be as article first in the patriotic creed of every wise and sound American today.—*Philadelphia Bulletin.*

AMERICAN ASSOCIATION OF NURSERYMEN

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Vice President—J. Edward Moon, Morrisville, Pa.

Treasurer—J. W. Hill, Des Moines, Iowa.

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Transportation—Charles Sizemore, Louisiana, Mo.

STATE AND DISTRICT ASSOCIATIONS

American Nurserymen's Protective Association—President, Irving Rouse, Rochester, N. Y.; secretary, Thomas B. Meehan, Dresher, Pa. Meets annually in June.

Association Oklahoma Nurserymen—President, P. W. Vaught, Holdenville, Okla.; secretary, Jim Parker, Tecumseh, Okla. Next meeting during week of State Fair at Oklahoma City, last of September or first of October.

California Association of Nurserymen—President, John S. Armstrong, Ontario. Secretary, H. W. Kruckeberg, Los Angeles, Cal.

Canadian Association of Nurserymen—President, E. D. Smith, Winona; secretary, C. C. R. Morden, Niagara Falls, Ont.

Connecticut Nurseryman's Association—President, Walter E. Campbell, New Haven, Conn.; secretary, F. L. Thomas, Manchester, Conn.

Idaho Nurserymen's Association—President, Anton Diedricksen, Payette, Idaho; secretary, J. F. Litooy, Boise, Idaho. No definite time has been set for next meeting. Probably in July at Boise, Idaho.

Illinois Nurserymen's Association—President, Guy A. Bryant, Princeton, Ill. Secretary, A. M. Augustine, Normal, Ill.

Massachusetts Nurserymen's Association—President, John Kirkegaard, Bedford, Mass. Secretary, David C. Stranger, West Newbury, Mass.

National Association of Retail Nurserymen—President, E. S. Osborne, Rochester, N. Y.; secretary, F. E. Grover, Rochester, N. Y.

New England Nurserymen's Association—President, A. E. Robinson, Lexington, Mass.; Secretary, R. M. Wyman, Framingham, Mass.; Annual meeting will be held on the last Tuesday in January in Boston.

New Jersey Association of Nurserymen—President, Carl H. Flemer, Springfield, N. J. Secretary-Treas., A. F. Meisky, Elizabeth, N. J.

New York State Nurserymen's Association—President, E. S. Osborne, Rochester, N. Y.; secretary, H. B. Phillips, Rochester, New York. Next meeting September. Probably at Utica.

Ohio Nurserymen's Association—President, T. J. Dinsmore, Troy, Ohio; secretary, W. B. Cole, Painesville, Ohio.

Oregon—Washington Association of Nurserymen—President, C. F. Breilhaupt, Richland, Wash.; secretary, C. A. Tonneson, Tacoma, Wash.

Pacific Coast Association of Nurserymen—President S. C. Miller, Milton, Oregon; secretary-treasurer, C. A. Tonneson, Tacoma, Wash. Place of next meeting to be decided later.

Pennsylvania Nurserymen's Association—President, Adolf Muller, Norristown, Pa. Secretary, Henry T. Moon, Morrisville, Pa.

Southern Nurserymen's Association—President, O. W. Fraser, Birmingham, Ala.; Vice-president, H. C. Caldwell, Atlanta, Ga.; Secretary and Treasurer, O. Joe Howard, Pomona, N. C. The next meeting is to be held in Birmingham the 21st and 22nd of August.

South Western Nurseryman's Association—President, W. A. Wagner, Durant, Okla. Vice Pres., J. M. Ramsey, Austin, Texas. Secretary-Treasurer, L. J. Tackett, Fort Worth, Texas. The next meeting will be held in Dennison, Texas, First Wednesday in September.

Tennessee Nurserymen's Association—President, George W. Poague, Graysville, Tenn. Secretary-treasurer, G. M. Bentley, Knoxville, Tenn.

Tennessee State Florists' Association—President, Leon Geny, Nashville, Tenn. Secretary-treasurer, G. M. Bentley, Knoxville, Tenn.

Texas Nurserymen's Association—President, William B. Munson, Denison, Texas; secretary-treasurer, J. M. Ramsey, Austin, Texas.

Western Association of Nurserymen—President, Lloyd C. Stark, Louisiana, Mo.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

INERTIA

Thomas Carlisle said "Men have immense irresolution and inertia" possibly this explains the indifferent attitude of nurserymen and others towards matters that are apparently vital to them. Market Development, Foreign Plant Exclusion, Standardization of Nursery Products, a uniform practice in selling at wholesale, etc. Perhaps once a year at the various conventions these subjects are brought up, discussed, committees are appointed to act upon them and then they are scarcely heard of again by the great majority until another year rolls around. Each individual is apparently too busy with his own particular affairs so he leaves it to George and George has more than he can attend to.

What a tremendous interest would be given to any of these movements if every nurseryman with an opinion of his own would write his views to the trade papers. What a help it would be to the few workers in the National Association and how much quicker would sentiment crystalize either for or against any particular line of action.

But as my old professor in physics used to say "Inertia is difficult to overcome, things would rather stay as they are."

"Say it with Flowers" is the slogan adopted by the Florists.

The nurseryman, not being so sentimental and much more practical, will have to adopt "Do it by Planting" as theirs if they wish to keep up with the band wagon.

HOW DO YOU FIND YOUR BUSINESS?

It is not all of us who have sufficient capital to advertise so as to have sufficient business handed to us by the mail every morning.

When we have figured out the largest appropriation we possibly can, it looks pitifully small in comparison with what we ought to have, and then how to spend it

so it will be most effective to bring the most profitable results is a problem.

Nearly every publication and advertising medium, given the opportunity, will begin to convince you by facts and figures that their particular medium is by far the best.

After considering them all the question is far from settled in your own mind just what to do. Find business you must in one way or another. Whether you are the proprietor of a one-horse concern or the director general of a million dollar corporation the problem is the same.

How best to do it you will have to decide for yourself.

Advertising of the present day has become so complex and of such great volume that only thousand dollar shouts are likely to be heard when addressed to the multitude. Many of us feel this so surely that we have little faith that our hundred dollar squeak will be heard.

This is a wrong view or a misleading one because advertising is done merely to find more business for our own particular concern and it may not be necessary to shout so very hard if we can gain the attention required by other methods.

Advertising ice skates in Florida or apple trees to city dwellers is not likely to be profitable.

Five dollars worth of phone calls to selected parties is preferable to a thousand dollars spent in such a manner so that after all it is up to each individual to figure out his own problems, how to find business?

The retail nurseryman depends primarily on his mailing list of selected names, acquired by acquaintance, suggested to him by others, blue books, transfer of properties clipped from the newspapers, garden clubs, building reports and numerous other sources. The more careful this list is compiled and kept up to date the more valuable it is. Among these he finds business, by personal solicitation, letters, catalogues, special offers, or in any way he can possibly arouse their interest in what he has to sell.

Customers are like money, if well taken care of they grow in quantity.

A satisfied customer is the best possible asset a business can have, and prosperous is the business that can grow in such a manner.

The wholesaler's problem of finding business is not quite so complex.

His mailing list is much less expensively compiled and is more or less fixed.

The main problem is to convince the buyers that dealing with him is to be preferred to all others, on account of quality, service, liberality or some other obvious reason.

Other things being equal, or nearly so, the firm most likely to get the business is the one that makes it easy for the customer to do business with them.

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